1985

ANNUAL

REPORT

ANIMAL HEALTH DIVISION

Alberta

AGRICULTURE

87-04282/

INDEX

Staff 1

General 6

Pathology Branch 8

Reference Laboratories Branch 11

Regional Laboratories Branch 20

Health Management Branch 22

Meat Hygiene Branch 41

Livestock Disaster & Predator Indemnity Programs 43

Specimens Examined 44

Submissions 45

Prominent Diseases 46

Special Investigations 50

Publications 67

Diseases: Cattle 70

Swine 83

Ovine 92

Caprine 98

Chicken 102

Turkey 110

Equine 115

Canine 122

Feline 129

Laboratory Animals 134

Rabbit 136

Fur-Bearing 139
Fish, Amphibian & Reptile 141
Exotic Pets, Wildlife & Zoo Animals 144
Rabies Summary 151
Miscellaneous Birds 152
Miscellaneous & Other Submissions 162
Fetal Examinations 164
Table of Parasites 168
Toxicoses 170
Poultry Salmonella Isolates 172
Poultry Health Program 174
Neoplasms 175

STAFF

DIRECTOR

R. G. CHRISTIAN, D.V.M., Dip. Vet. Path., Diplomate A.C.V.P.

Eileen Shewchuk

Jeanine Motlik

E. Morley

S. Phillips

R. June

M. Aranas

PATHOLOGY BRANCH

G. R. JOHNSON, D.V.M., Dip. Vet. Path., Diplomate A.C.V.P.

A. M. Fahrion

Animal Disease Section

D. W. MacDonald, D.V.M., M.Sc.
W. A. Perry, D.V.M., M.V.Sc.
B. Morden, D.V.M., M.Sc.
M. Schoonderwoerd, D.V.M.
M. Kennedy, B.Sc., M.Sc., Ph.D.
A. Thibodeau
C. Collett
D. Moraiko
C. Wright
P. Daoust, D.V.M., Ph.D.

Poultry Disease Section

J. HANSON, B.Sc., D.V.M.

D. Onderka, D.V.M., M.S., Dip. Vet. Path.
D. Fraser, A.H.T.
E. Wasylyshyn

Reproductive Section

G. G. KLAVANO, B.Sc., D.V.M.

V. Maitland, A.H.T.
S. Olchowy

PREVENTIVE MEDICINE BRANCH

T. L. CHURCH, B.S.A., D.V.M., M.Sc.

J. R. Whittaker

Livestock Inspection

R. SHUTE, D.V.M., Dip. Vet. Path.

R. A. Fenton, D.V.M.
R. H. Thompson
B. Simpson

Epidemiology

M. W. STONE, B.Sc., M.R.C.V.S., Dip. Vet. Med.

C. Schipper, D.V.M.
G. W. Ollis, D.V.M.

MEAT HYGIENE BRANCH

G. W. SUMMERS, D.V.M.

T. Taylor

MEAT HYGIENE BRANCH (Con't)

A. Duering

M. Johnson

D. Morris
H. Kowalchuk
D. Harding
E. Chudleigh
B. Stevens
D. Kahut
T. Ivins
K. Pratt
L. Leskosky
C. Wozniak
H. Falk
D. Schonheiter
L. Buchanan
G. McWilson

B. Morrison
H. Gross
H. Hyrve
R. Bailer
S. Soper
B. Benoit
R. Fyten
B. Holding
P. Dac
R. Juuti
R. Boborosky
P. Boyson
D. Cameron

R. Lowe
M. Willis
C.A. Banack
R. Ainsworth
O. Munchrath
R. Stephens
J. Alwood
W. Zapisocki
R. McMann
R. Halmrast
D. Banack
R. MacLean
A. Clark

REFERENCE LABORATORIES BRANCH

J.F.C.A. PANTEKOEK, B.S.A., D.V.M., Ph.D., Diplomate A.C.V.M.

P. Deacon

B. Taylor

Microbiology Section

Virology-Serology

G. PAPP-VID, D.V.M., M.Sc., Ph.D.

E. Barager, R.T., A.R.T., B.A.
J. Wu, B.Sc., M.Sc.
E. Ruzsicska, R.T.

(B. Larson, B.Sc., R.T. - seconded by Energy and Natural Resources)

Bacteriology-Mycology

S. Rawluk, B.Sc., MLS
C. Plante-Jenkins, R.T., B.Sc.

Bacteriology-Mycology (Con't)

I. Lewis, A.H.T.
E. Bowlby
A. Wilson, R.T.
L. McFadzen, R.T.

Histopathology and Electron Microscopy Section

L. D. ARMSTRONG, D.V.M., M.V.Sc.

F. Leggett, B.Sc. (Honors), Ph.D.
M. Johnson, R.T.
D. Hansen, R.T.

Toxicology Section

B. E. BECK, D.V.M., Diplomate A.C.V.P.

R. Audette, B.Sc. (Honors), Ph.D.
R. Smith, B.Sc. (Honors), Ph.D.
D. L. Lewis, B.Sc. (Honors)
E. Christie, B.Sc. (Honors), M.Sc.
M. Fiedler
C. Brodeur, B.Sc. (Honors)
M. England
G. Almadi, B.Sc., (Engineering)
C. Maxwell, C.E.T., A.C.I.C.
S. Tong

REGIONAL LABORATORIES BRANCH

W. T. NAGGE, D.V.M.

C. Kaip

Lethbridge Laboratory

W. N. HARRIES, B.V.M.S., M.Sc., M.R.C.V.S.

G. A. Chalmers, D.V.M., Dip. Vet. Path.
J. A. Wood, B.A.
D. Bolingbroke, B.A., D.V.M., M.V.Sc.
L. Ruff, A.H.T.
D. Malchow
A. Gleb
R. Cassis, B.Sc.
S. Marshall, B.Sc.

Fairview Laboratory

W. T. NAGGE, D.V.M.

J. Pritchard, B.A. (Honors), D.V.M.
K. Manninen, B.Sc. (Honors), M.Sc.
C. Kaip
K. Dies, Biol. Sc.
M. Bartholet

Airdrie Laboratory

P. N. NATION, D.V.M., M.V.Sc., Diplomate A.C.V.P.

S. Crowe, D.V.M., Dip. Vet. Path.
P. Frelier, D.V.M., Ph.D., Diplomate A.C.V.P.
S. Lundberg, B.Sc., R.T.
K. Ursu
L. Becker
B. Silbernagel, A.H.T., R.T.
K. Leung, B.Sc., R.T.
H. Sissons, A.H.T.
C. Dobson, A.H.T.

ANIMAL HEALTH DIVISION

R.G. CHRISTIAN, D.V.M., Dip. V. Path.,
Diplomate A.C.V.P., DIRECTOR

Division programs and services were primarily oriented to assist the agricultural industry in reducing losses due to disease management systems for disease prevention, help prevent the spread of infectious disease, and assist in the production of safe quality food. In addition the Division has activities and responsibilities in diagnosis and control of wildlife diseases, assistance with laboratory animal research, disease diagnosis, and assistance in public health situations related to diseases transmissible from animals to man.

The Division is responsible for the administration of the Livestock Diseases Act, the Meat Inspection Act, the Fur Farms Act, the Animal Protection Act, and to a lesser extent the Veterinary Profession Act. Work was done during the year in order to update several of the regulations under these Acts. Contact with a rabid bat in northern Alberta was believed to have resulted in death from rabies in a twenty-five year old person. This is the first human death resulting from rabies in Alberta. Rabies control in skunks continued. The occurrence was low consisting of 8 positive animals diagnosed. Population reduction was carried out in the County of Warner to control skunk rabies. Four bats were found positive during the year.

Considerable time was spent by several Division staff on establishing recommendations for action in the event of further sour gas well blowouts.

Brain infection in lambs caused by a bacterium Hemophilus agni was diagnosed for the first time in Alberta. The disease has caused mortality in several flocks.

Considerable testing was done for Mycotoxins in grain that could not be harvested in the fall and spent the winter under the snow. No positive samples were identified, although further testing revealed that fungi capable of producing toxin were present.

After seventy-five years of operation, the Provincial Board of Health was disolved with the passing of a new Public Health Act. As a result, communication between departments on public health issues has been established by other means.

The Summer Veterinary Work Experience Program assisted in providing for thirty-five veterinary students to work in practice situations throughout the province.

PATHOLOGY BRANCH

During 1985 the Pathology Branch continued to adapt to the electronic age. Reports now generated on the word processor are easily accessible and require a minimum of filing. Electronic distribution to computers in several private practices was begun. In conjunction with other branches, the nomenclature for diagnoses and computerization of the divisional records was planned and initiated. A laboratory manual for veterinary practitioners was also completed. Several Agri-fax and scientific publications were completed. Branch staff attended courses in personnel development and computers again this year.

Submissions to the Pathology branch were mostly from veterinarians. Food production species constituted most of the workload. Overall submissions decreased 1.85% compared with 1984.

Iodine problems surfaced in three species. Goitre was prominent in calves from cattle fed natural rock salt. There was insufficient iodine available in the product. In farmed foxes iodism became a problem with the feeding of uncooked thyroids in feed from by-products of meat packing. Goitre was also a problem in a flock of lambs.

Calf scours was not a major problem in 1985 though all the common viruses and bacteria were isolated from various outbreaks. The Branch continues to promote good husbandry as the best prevention for calf scours.

Selenium toxicity occurred in lambs due to miscalculations of injections given at birth. Copper toxicity occurred in sheep and lambs due to the feeding of bovine supplements and milk replacers. Coccidiosis, pneumonia and predators were also problems associated with sheep.

In pigs, Hemophilus pleuropneumonia, Streptococcus suis and transmissible gastroenteritis (TGE) infections were common submissions. In conjunction with Reference Laboratory Branch, a trial was done to test the effectiveness of the fluorescent antibody test for the diagnosis of TGE virus infection.

Lindane toxicity occurred in dairy cows several times due to the consumption of treated Canola seed. Pathology branch has instituted new evaluation techniques to assess the nutritional status of dairy calves and for the evaluation of milk replacers.

To accommodate the numbers of submissions from large feedlots, the branch has set up a new communication system for reporting to the veterinarians involved. There appears to be good results from limiting the number of pathologists involved and providing week by week summaries.

Submission of fish by Energy and Natural Resources were found to have Mycobacterium chelonae in one instance and Vibrio cholera non 01 agglutinating, nontoxigenic, in another. Both infections are new to the province.

In poultry, major concerns were cardiac failures and ascites in broilers, nutritional type shell quality in laying chickens and coliform septicemia and aspergillosis in turkeys.

The remaining "Shaker calves", about which there has been a report in scientific literature, were sent to John Hopkins Research Hospital in Baltimore for further study.

REFERENCE LABORATORIES BRANCH

There was a rather remarkable 11 per cent decrease in samples handled in 1985 (70,234 specimens) compared to 1984 (79,270). The slack was more than made up by considerable increase in project related work, both in relation to disease investigations, programs and practical research.

Dr. Pantekoek was seconded by the department to a CIDA-OMAF aid project to Indonesia. During this period, Drs. Armstrong, Beck, and Papp-Vid each took their turn at acting Branch Head duties.

Toxicology Section:

Rather extensive changes took place in the section. Dr. Beck transferred from his position as head of the Animal Disease Section in the Pathology Branch to become the head of the Toxicology Section.

Laboratory Reorganization and Reorientation

For many years, the laboratory served the chief medical examiner and performed forensic investigations into human deaths and illness. In 1983 these functions were taken over by the newly created medical examiner's facility. Diagnostic analytic service for human toxicology and various functions of the Provincial Analyst were transferred in 1985 to the University of Alberta Hospital. As well, quality control analyses, previously conducted for the Alberta Liquor Control Board, were no longer performed by this laboratory. Water analyses were restricted

to those directly related to agricultural endeavours. As a result of these changes, the laboratory confined its activities to those directly associated with agriculture. Chemical analyses were done to determine nutritional status for trace minerals, principally copper and selenium, and Vitamin A. Significant numbers of requests for calcium, phosphorus, and magnesium determinations were received.

Veterinary diagnostic toxicology remained the chief function of the laboratory. Demand for increased nutrition related analyses and clinical chemistry arose from an emerging emphasis on preventive herd health and epidemiology as well as from increased demand for test results on sick animals.

There were assorted technique developments that took place during the year. Some of these were:

a) A method for iodine determination in salt was developed because goitre developed in cattle fed salt imported from Utah which was advertised as being more healthful because of its natural "origins." The result of analysis showed it consisted of only six parts per million of iodine whereas salt should normally contain 60 parts.

b) Due to restrictions imposed on the use of chloramphenicol by the federal government, an analytic technique was devised on the liquid

chromatograph to detect residues of this drug in animal tissues.

c) Horses are commonly overtreated with phenylbutazone which can be toxic, especially in ponies and foals. Several hours after administration, the phenylbutazone has been metabolized and accumulates in the body as the metabolite oxyphenylbutazone. A more sensitive technique was devised to look for the lower levels of this highly toxic metabolite as a means of diagnosing overdosing with the drug.

Quality Control Projects

Quality control has been of paramount importance to the laboratory and apart from internal controls built into analytic techniques, external quality control projects were as follows:

a) The College of American Pathologists inter-laboratory control samples were sent out to participating laboratories on a quarterly basis throughout the year. Results of analysis were provided for comparison on calcium, phosphorus, magnesium, and a variety of clinical chemistry parameters, as well as some toxicants.

b) The Communicable Disease Control Centre (CDC) forwarded blood to laboratories to compare lead analysis accuracy on a quarterly basis.

c) The Quebec Centre of Toxicology sent out quality control samples to test analytic procedures for arsenic and mercury.

d) Through the auspices of the Alberta Water Analysis Committee, "round robin" analytic testing on water samples took place with 22 participating laboratories within Alberta.

e) An informal interlaboratory exchange of samples was another quality control endeavor for comparison of results. This took place principally in the area of the trace minerals selenium and copper.

Histology-Electron Microscopy (EM) Section:

Dr. Armstrong worked hard at daily preparations for the examinations sponsored by the American College of Veterinary Pathologists. Additionally, a week of preparation was spent at WCVM and also a week at the Charles Louis Davis Foundation Center (Downey, California). Examinations will be finalized in 1986.

During part of his turn as acting Branch Head, Dr. Armstrong contributed significantly to the branch's budgetary affairs by instituting a more meaningful spending limit information feedback system to all staff.

A steady number of tissues were prepared for the glycol methacrylate process. Experimentation with special stains showed better resolution of detail under microscopic examination.

STEP employees were involved in several projects in immunohistochemistry (canine pemphigus, ovine mesengio-capillary glomerulonephritis, and bovine respiratory syncytial virus) and in electron microscopy (EM). Other projects undertaken included: examination of seal lungs for for helminths; brain sections for toxoplasmosis and bacterial kidney disease in fish.

An IBM personal computer was incorporated into section functions and the EM log was computerized for all 1985 entries.

The usual increase in EM diagnostic demands happened during the spring calf scour season. Decreases were noted in canine parvovirus requests for EM diagnosis.

A safer, but much more expensive citrus-based solvent was tried in replacement of xylene and was found satisfactory for histologic tissue processing. Xylene continues to be used in this laboratory.

An interesting EM case involved parapox viruses from bovine oral lesions thus supporting the diagnosis of bovine papillary stomatitis.

Virology-Serology Section:

Dr. Papp-Vid visited Weybridge, England laboratories for updating virology-serology diagnostics (especially bovine virus diarrhea-mucosal disease (BVD-MD)) on his way to an international symposium held at Budapest, Hungary where he presented a scientific paper.

An extension television video was prepared on mosquito processing for Western equine encephalomyelitis (WEE) monitoring in the province. This was aired in the southern part of the province.

Several projects were undertaken jointly with various members of the division, i.e. Enzyme linked immunosorbent assay (ELISA) survey for bovine respiratory syncytial virus (BRSV); porcine transmissible gastroenteritis (TGE) trial for efficacy of fluorescent antibody technique (FAT) in laboratory diagnosis.

Other developments included incorporation of the TGE-serum neutralization test; initiation of ELISA protocol for TGE serology; incorporation of a commercially available kit for the diagnosis of Chlamydia (expensive, but very accurate); initiation of an ELISA test for cytopathic BVD virus and detection of BRS virus in frozen sections by means of the fluorescent antibody technique.

Extensive serologic testing for bovine leukosis virus infection took place during the year.

Bacteriology-Mycology Section:

Dr. Barbara Kingscote was contracted to look after the section's responsibilities during Dr. Pantekoek's absence. Significant contributions were made by Dr. Kingscote to diagnostic capabilities in Leptospirosis and *Mycoplasma* species identification.

One veterinary practitioner spent time in the laboratory to improve bacteriology diagnostic skills.

Workload shifts, within the section, were instituted to allow streamlining of functions and to focus on distinct areas of diagnostic cases versus disease investigation oriented project or research work.

The quality control program was expanded to include regional laboratory scientists in a "round robin" of both in-house and College of American Pathologists samples.

The two scientists attended a very useful peer meeting held in Fairview.

Mrs. Ila Lewis was seconded to take charge of the bacteriology diagnostic work for a feedlot cattle respiratory disease project. Section staff participated in providing antibiograms (MIC - minimum inhibitory concentrations) for isolates.

The bacteriology laboratory manuals were updated and copies distributed to the regional laboratories. Project related work included: Bighorn sheep project - transmission studies of Pasteurella hemolytica Bighorn sheep (BS) type to both domestic and Bighorn sheep; serobiotyping of BS type Pasteurella hemolytica by Dr. Donachie (Scotland) verified isolates of this organism to be Pasteurella hemolytica types T3, T15, and untypable; culture and lactase testing of samples from a TGE project (Drs. Perry and Papp-Vid); evaluation of Dr. Fales' new MIC tray prepared for veterinary use; problems of Mycoplasma bovis in submitted milk samples (not present in samples tested); more work in Leptospira identification in kidneys from bovine fetuses (Drs. Chalmers and Nagge); health screens were performed on rats at the University of Alberta Medical Science Department, monitoring prevalence of Pasteurella pneumotropica; porcine intestinal tract (ileum and colon) screened for selected Campylobacter species and evaluation of the commercially available "Coli-Tect" K99 E. coli kit which was found to be quite good and useful for practitioners and producers.

Developmental work incorporated the indirect FAT protocol for K99 E. coli detection in smears; similar capabilities for F41 and K987P types E. coli were delayed because of problems; literature review was initiated on "DNA probe analysis" as a diagnostic tool; specific antiserum has now been produced in rabbits against various serotypes of Hemophilus pleuropneumoniae (serotypes one to seven) for use in the

indirect FAT protocol and the beta-lactamase test is used for all Staphylococcus strains to overcome problems with beta-lactamase producers showing susceptibility to Penicillin in the in vitro test.

Interesting cases included our first isolation of Streptococcus suis type 1 (type 2 is routinely isolated) and a mastitis case in a very expensive Holstein cow imported from Ontario and caused by the yeast, Tricosporum beigelii.

For isolation of Listeria monocytogenes from central nervous system cases in bovine and ovine species, our laboratory has reverted to the old method of "cold enrichment" over time in order to eliminate the use of laboratory animals in this protocol.

REGIONAL LABORATORIES BRANCH

The Regional Laboratories Branch was responsible for the operations of laboratories located in Airdrie, Lethbridge, and Fairview. These laboratories offered a diagnostic service to livestock and poultry producers and their veterinarians from Red Deer south and from Valleyview north. As well, consultation on matters of disease and its prevention was provided to livestock and poultry producers and their veterinarians. Field trips were made to investigate unusual or serious disease problems.

Consignments were 104% of those for 1984.

Disease in swine due to infection with Streptococcus suis type II increased and was a disease of economic significance for some producers. Frequently, the disease caused sudden death from septicemia and suppurative meningitis was common.

Salmonellosis was diagnosed in dairy calves in one herd and in cattle from 2 feedlots. Losses were minimal and the disease was contained quickly.

Pasteurella pneumonia was prevalent in feedlot calves going on feed in the fall of the year. Heavier weaning weights have resulted in more calves going into feedlots than was the practice in years past. The

incidence of Pasteurella pneumonia is higher in calves than in yearlings and this accounts for the concern that feedlot operators have about the management of this disease. The Branch, along with Pathology, Reference & Health Management branches, directed resources to address these concerns.

The analyses of spring threshed grain from the Peace River region for mycotoxins did not uncover any mycotoxin contaminated grain.

The Airdrie laboratory continued their involvement in instructing Animal Health Technician students from Olds College as did the Fairview laboratory with students from Fairview College and the Northern Alberta Institute of Technology.

Professional and clerical staff of the Fairview laboratory put considerable effort into adapting the Snovet terminology and our displaywriters to the Division's record keeping system.

HEALTH MANAGEMENT BRANCH

The prevention and control of diseases in livestock herds, the administration of legislated animal health programs, safeguarding human health by control of designated diseases and enforcement of regulations for sale of livestock medicines continued to be the major responsibilities of the Health Management Branch in 1985. Techniques for disease prevention and improved production were emphasized to livestock producers and veterinarians in Alberta. Legislative programs relating to livestock inspection at auction markets, livestock medicine outlet licencing and licencing of fur farms were reviewed and revisions to the regulations were proposed. Disease prevention and control programs were continued by both the Epidemiology and Livestock Inspection sections.

The demand for extension activities and programs from this Branch continued at similar levels. Livestock health and disease information was provided to livestock producers by all Branch veterinarians and many private sector veterinarians. Over 100 veterinarians in private practice throughout Alberta were extensively utilized for auction market inspections, community pasture inspections, swine herd health visits, and disease investigations.

ARDA Veterinary Clinics

The six ARDA veterinary clinics in western and northern Alberta continued to provide a full range of veterinary service. The clinics at

Edson, High Prairie, and Fairview continue to be strong and viable practices. Additional income support was required at Valleyview, Manning, and Fort Vermilion in order to retain practitioners in these areas. A mileage assistance program was continued to encourage greater use of the veterinary services in I.D. 23.

Preconditioning Program

Although the numbers of producers who participated in the Alberta Certified Preconditioned Feeder Program remained similar to 1984, there was a decrease in the northern and Peace River areas and an increase in central and southern Alberta. There were 17,247 calves certified with 9,467 sold at 19 monitored sales in 18 locations in Alberta. Producers received average additional prices of $5.90 cwt for preconditioned steers and $4.40 cwt for heifer calves in 1985. The average days weaned before sale in 77 herds was 50 days. Preconditioned calves have been shown to gain significantly more weight than those not weaned. The proportion of all preconditioned calves that became sick and died in feedlots after sale in 1985 was 4.6% and 0.2%, respectively, compared to 27.3% and 1.1% for regular calves surveyed. Brian Harris served as ACPF Coordinator assisting with administration of the ACPF program.

Research Projects

The Bovine Respiratory Disease Project, funded by Farming for the Future, was continued as a joint project between Alberta Agriculture and Veterinary Infectious Disease Organization. The objective of the study

is to determine the risk factors which are associated with the development of respiratory disease in feedlot cattle in Alberta. Dr. Susan Wilson supervised three technicians who entered data from the feedlots on the study during 1985.

Data from a trial to assess the efficacy of a live pasteurella vaccine, funded by VIDO and Alberta Agriculture, was completed. The data indicated there may be some benefit from vaccinating calves well before the stress period. The Health Management Branch cooperated with the laboratory branches in a feedlot bacteriology trial conducted from Airdrie Regional Laboratory.

Long Term Effects of Gas Well Blowouts

A study to assess the long term effects on livestock health from the Lodgepole blowout was conducted by Brian Harris. Twenty-eight livestock producers in the Violet Grove area were interviewed and data collected. The lack of detailed herd records was a major limitation of the study. It appears that replacement heifers that were exposed as calves during the blowout have not grown and developed as well as producers had expected. Most livestock producers felt there were few long term effects on the mature livestock within the area.

EPIDEMIOLOGY SECTION

The responsibilites of the Epidemiology Section included the administration of the Designated Communicable Disease and the

Destruction and Disposal of Dead Animals Regulations under the Livestock Diseases Act, assembling information regarding disease prevalence in food producing animals, conducting and supporting extension activities, conducting detailed investigations of disease problems in the field, administration of the Swine Herd Health Program, drug and vaccine trials, and applied research projects. Veterinary practitioners continue to play a very active role in the Swine Herd Health Program conducting most of the inspections in the commercial section and several on seedstock herds. In addition, practitioners continue to participate in local extension activities and on occasion, conducted disease investigations on our behalf.

Dr. Schipper returned at the beginning of September having completed the requirements for the degree of Master of Science at the University of Guelph. Dr. Bauck, who had been filling this position on a temporary basis, left at the end of the May to set up a veterinary practice limited to swine at Beiseker. Dr. Palechek resigned his position as cattle veterinarian in April and following a competition, Dr. Gerald Ollis, who owned his own practice in Leduc, accepted the position. He commenced duties in October.

Epidemiology and Communicable Diseases

Broad surveillance of disease in food producing animals was maintained by monitoring various laboratory and Health Management Branch reports and by means of computer searches. More detailed information was maintained for diseases of particular interest to the branch,

primarily those named in the Designated Communicable Disease Regulation. The following table shows a number of positive diagnoses for each of these diseases for 1985.

Cattle		Swine	
Leptospirosis	2	Leptospirosis	0
Salmonellosis	9	Salmonellosis	2

Sheep		Poultry	
Brucella ovis	1	ILT	10
Footrot	15	Salmonellosis	10

In each case, appropriate action was taken to control the outbreak and to prevent its spread to other premises.

The Brucella ovis survey was completed during the year and a report prepared for publication in the Canadian Veterinary Journal by Dr. Niilo of A.D.R.I., Lethbridge, as principle author. The serological survey for bovine respiratory syncytial virus was also completed and the results made available to large animal practitioners. This survey utilized blood samples collected for the BVD survey, which was completed in 1984. A swine serum bank was commenced and A.D.R.I., Lethbridge is now forwarding the results of all leptospirosis serology to us for epidemiological purposes.

Extension

Extension or technology transfer continues to be a very important role of the branch. Livestock producers remain the main target audience except for the Animal Health Division Newsletter which is forwarded to all large animal practitioners in the province and all livestock specialists within the department. 1985 was the third year that the Newsletter has been published on a regular monthly basis.

Presentations were made at meetings of producers on 50 occasions and to other groups on 14 occasions. The latter included one talk to students at the University of Alberta, three to students at the regional colleges, three to professional groups, four to other department staff, one to a group of SPCA inspectors, and two to school children. The largest number of meetings (29) were related to beef cattle while 21 related to swine, seven to dairy cattle, two to sheep, and one to horses. The remaining four covered general topics.

Several articles written by members of the branch were published in various trade journals including a regular column in the Western Hog Journal. Numerous telephone interviews were conducted for either radio broadcast or publication and two of the fact sheets in the Alberta Pork Production Handbook relating to health were revised and updated.

The film and slide kit library continues to be a well used source of resource material, particularly by veterinary pracitioners. Expansion

and reorganization was continued again with the help of a STEP student during the summer mmonths. Seventy-five slide kits were loaned to practitioners during 1985 and films were borrowed on 10 occasions indicating that veterinary practitioners are playing an increasing role in extension.

Despite the fact that the Animal Health Home Study Course is no longer being formally offered on a regional basis in the province, 117 copies of the course were sold in 1985. Minor revisions and updating of lessons will take place as supplies of each become low enough to necessitate reprinting.

Disease Investigations

Disease problems on 23 farms were investigated in depth by members of the branch. On most of these premises, veterinary practitioners had been involved and were seeking further help having been unable to solve the problem satisfactorily. Occasionally, more than one visit was required to collect further specimens or data or to monitor progress of the problem.

Ten of these investigations involved beef cattle, four dairy cattle, and nine were related to swine. Respiratory disease, scours, congenital defects, sudden deaths, and cysticercosis were all problems encountered in beef cattle while abscessation, sudden deaths, mineral deficiencies, and swellings due to trauma were problems seen in dairy cattle. feed.

Reproductive problems were investigated in two swine herds and other problems seen included transmissible gastroenteritis, weaning diarrhoea, high losses in feeder pigs and a suspected palatability problem with feed.

Swine Herd Health Program

Enrolment on the program again increased in 1985, however, not as dramatically as in previous years due primarily to the fact that a significant number of commercial herds were resigned at the end of their four year period of enrolment. This was the result of a decision made by the Advisory Committee in 1981 in order to allow a larger number of herds to participate. Hopefully, the liaison built up between commercial producers and their veterinary practitioners will continue after their period of enrolment on the program has expired.

Health Management Branch veterinarians continued to conduct a high proportion of the inspections in the seedstock section. In addition, they carried out the initial inspection for all new herds including commercial herds to ensure eligibility and to orientate them regarding the program. Herds contributing swine to the three major shows and sales in the province received a health inspection immediately prior to the event and a health certificate was issued in each case. One breeder, however, was not permitted to use the ROP test stations following an outbreak of acute infectious disease in the herd.

The general health status of the herds enrolled on the program remains good. Many of the disease problems experienced by some herds are influenced by management and includes such conditions as neonatal and post-weaning diarrhoea, mastitis-metritis-agalactia complex, arthritis, enzootic pneumonia, and atrophic rhinitis. Hemophilus pneumonia continues to be of major concern to the swine industry and this disease was diagnosed in one seedstock herd in August. As a result, the owner decided voluntarily to depopulate. Other diseases of concern to the industry were mange, Streptococcus suis Type II infection, intestinal adenomatosis, and pasteurella pneumonia.

Head and lung retrieval continues to be relatively successful despite the fact that only two major packing plants are slaughtering hogs in the province. Producers whose hogs are slaughtered at Red Deer are fortunate in that head and lungs are evaluated in the plant by a local practitioner.

The Advisory Committee met in November when a motion was passed to look into the feasibility of a separate named category for the so-called minimal disease herds. A sub-committee was appointed for this purpose and they were asked to present their findings to a full meeting of the committee to be held in the spring of 1986. Nearly one-third of the herds in the seedstock section now fit this description. During 1985, there were three veterinary practitioners in the province who devoted all their time to swine, while a number of others were actively involved in swine practice.

Summary of Activities for 1985

During the interval January 1, 1985, to December 31, 1985; Number of seedstock herds decreased from 64 to 58

Number of commercial herds increased from 172 to 186

Total membership increased from 236 to 244

Number of herds added to the program - 67

Number of herds deleted from the program - 59

Number of herds visited by HMB staff - 86

Number of herds visited by veterinary practitioners - 473

Number of snouts examined for scoring - 2,237

Overall mean snout score - 0.71

Number of lungs examined for scoring - 5,040

Overall mean lung score - 0.53

LIVESTOCK INSPECTION SECTION

Auction Markets

Forty-Five auction markets were licenced for full-time operation and twelve restricted licences were issued. Restricted licences are limited to 5 or 10 sales per year and were mainly for horse sales and fall calf sales sponsored by local producer associations. Veterinary inspection was provided at all of these. Three new auctions were approved and licenced but two of them closed down again after a few months of operation.

During 1985, 1,899,657 animals were inspected, down only slightly from last year, and the number of sales decreased marginally from 3,464 in 1984 to 3,333 in 1985. The most common causes for rejection of cattle at auction markets were cancer eye, lameness, lumpjaw, respiratory and febrile conditions, and eye infections. In swine, the most common reasons for rejection were mange, underweight piglets, and rhinitis.

Footrot was the leading cause for rejection of sheep. All sheep rejected for footrot were either sent to slaughter or, if they returned to their home premises, a quarantine was issued under the authority of the Sheep Footrot Regulation. This quarantine prohibits the sale of sheep for any reason except slaughter, and remains in effect until the disease is shown to be eradicated in the flock.

Assembly Stations

Fifty-five assembly stations were supervised for operational standards and sanitation. The most frequent cause of complaints were lack of protection for pigs from the elements and inadequate loading facilities. Operators have responded well to our requests for improvements.

Community Pastures

Veterinary inspection of all livestock at entry was again provided at 45 different pasture locations in 1985. These included 33 provincial grazing reserves and 12 private pastures. Inspection of a total of

99,484 cattle and 14,809 sheep was carried out involving a total of 175 entries. The Hayes Provincial Grazing Reserve is expanding its sheep grazing capacity and increasing numbers of sheep are using this pasture.

There were few major disease problems on the various pastures but photosensitization in a southern Alberta pasture was a significant problem. Only a few examinations of live animals on pasture were conducted elsewhere. Fifty-two post-mortems were performed by veterinary practitioners. The most common causes of death on the pastures, confirmed by post-mortem, were pneumonia, abomasal ulcers and bloat in calves.

The Medicine Lake Provincial Grazing Reserve maintained its sheep footrot free status with considerably less veterinary effort than in previous years.

Livestock Medicines

The purpose of maintaining licenced outlets under these regulations was to provide farmers and ranchers with a convenient source of certain livestock medicines. Regular supervision was provided to ensure they met the requirements of the regulations. In 1985, 284 premises were licenced and monitored by one full time inspector.

Fur Farms

The Branch continued to maintain its responsiblity for licencing fur farms.

The price of fox pelts is still high causing a great deal of interest in fox farming. Three new fox farms were inspected, approved, and licenced bringing the total licenced fox farms to 24. The annual fox show and education day of the Alberta Fox Breeders Association was again a great success.

Mink pelt prices were down from an average of $39.60 in 1984 to $33.75 in 1985. There were 9 licenced mink farms. In total, 54 fur farm licences were issued this season, including 20 chinchilla licences.

There is moderate interest in the raising of lynx in captivity. There are 4 or 5 fur farms attempting to successfully breed lynx in captivity, so far with limited success.

CATTLE

Reasons for Rejection/Slaughter

	1981		1982		1983		1984		1985	
	No.	%	No.	%	No.	%	No.	%	No.	%
Abscess	88	1.6	166	2.4	143	2.5	107	1.7	106	1.8
Arthritis	40	0.7	82	1.2	87	1.5	126	2.0	119	2.0
Bloat	---	-.-	87	1.5	37	.6	38	.6		
Cancer Eye	1541	27.3	1787	25.8	1325	23.2	1569	24.9	1371	23.1
Cardiac	---	-.-	---	-.-	49	.9	33	.5	28	.5
Central Nervous Disorders	---	-.-	---	-.-	35	.6	15	.2	12	.2
Distress	42	0.8	129	1.8	143	2.5	155	2.4	208	3.5
Enteritis	---	-.-	146	2.1	158	2.8	194	3.1	231	3.9
Febrile	81	1.4	125	1.8	508	8.9	549	8.7	52	.9
Footrot	---	-.-	---	-.-	124	2.2	65	1.0	194	3.3
Hardware	---	-.-	463	6.7	3	.0	9	.1	3	.1
Lame	21	0.4	41	0.6	576	10.0	602	9.5	634	10.7
Lice	442	-.-	715	10.3	41	.7	30	.5	8	.1
Lumpjaw	139	2.5	201	2.9	536	9.4	584	9.2	491	8.3
Mastitis	9	0.1	12	0.2	136	2.4	147	2.3	166	2.8
Metritis	177	3.1	148	2.1	0	.0	0	.0	0	.0
Navel Infection	1918	33.9	1745	25.2	132	2.3	160	2.5	161	2.7
Other Diseases	---	-.-	---	-.-	227	4.0	267	4.2	203	3.4
Physical Abnormalities	351	6.2	264	3.8	85	1.5	46	.7	42	.7
Pinkeye/Eyes	457	8.1	819	11.8	316	5.5	429	6.8	505	8.5
Pneumonia	28	0.5	59	0.9	720	12.7	752	11.9	1008	16.9
Ringworm	30	0.5	22	0.3	50	.9	182	2.9	119	2.0
Under Age	---	-.-	---	-.-	21	.4	47	.7	37	.6
Urogenital	38	0.7	6	0.1	223	3.9	228	3.6	202	3.4
Warts					0	.0	0	.0	0	.0
TOTALS	5094	100.0	5655	100.0	5725	100.0	6333	100.0	5938	100.0

SWINE

Reasons for Rejection/Slaughter

	1981		1982		1983		1984		1985	
	No.	%	No.	%	No.	%	No.	%	No.	%
Abscess	---	-.-	17	0.5	---	-.-	---	-.-	---	-.-
Arthritis	293	6.4	192	5.1	194	3.3	447	5.7	264	5.8
Central Nervous Disorders	---	-.-	---	-.-	---	-.-	11	.1	---	-.-
Dermatitis	12	0.3	6	0.2	16	.3	67	.9	2	.1
Distress	---	-.-	---	-.-	99	1.7	420	5.3	189	4.2
Enteritis	50	1.1	40	1.1	61	1.0	206	2.6	34	.8
Lame	---	-.-	28	0.8	82	1.4	89	1.1	49	1.1
Mange	714	15.6	799	21.1	1342	23.1	1839	23.2	1118	24.7
Other Diseases	485	10.6	347	9.2	187	3.2	258	3.3	193	4.2
Parasitism	---	-.-	6	0.1	1	.01	23	.3	---	-.-
Physical Abnormalities	---	-.-	---	-.-	56	1.0	31	.4	111	2.5
Pneumonia	140	3.1	30	0.7	159	2.7	356	4.5	575	12.7
Rhinitis	1413	30.8	1285	34.0	1798	30.9	2016	25.4	782	17.3
Underweight	1397	30.5	1030	27.2	1820	31.3	2157	27.2	1202	26.6
TOTALS	4581	100.0	3781	100.0	5815	100.0	7920	100.0	4519	100.0

S H E E P

Reasons for Rejection/Slaughter

	1981		1982		1983		1984		1985	
	No.	%	No.	%	No.	%	No.	%	No.	%
Abscess	1	0.2	6	0.8	21	2.9	1	.1	1	.2
Arthritis	---	-.-	8	1.1	0	.0	2	.2	---	-.-
Brucella Ovis	---	-.-	---	-.-	---	-.-	11	1.4	---	-.-
Distress	---	-.-	5	0.7	23	3.2	2	.2	1	.2
Footrot	303	56.1	572	78.9	550	75.7	680	86.5	494	85.9
Lame	172	31.9	97	13.4	11	1.5	28	3.6	---	-.-
Mastitis	1	0.2	4	0.6	7	1.0	5	.6	9	1.5
ORF	---	-.-	---	-.-	62	8.5	29	3.7	---	-.-
Other Diseases	60	11.1	3	0.4	48	6.6	13	1.7	57	9.9
Pneumonia	2	0.4	30	4.1	5	.7	15	2.0	13	2.3
TOTALS	540	100.0	725	100.0	727	100.0	786	100.0	575	100.0

HORSES

Reasons for Rejection/Slaughter

	1981		1982		1983		1984		1985	
	No.	%	No.	%	No.	%	No.	%	No.	%
Foundered	--	-.-	--	-.-	--	-.-	5	8.8	--	-.-
Influenza	3	7.0	2	3.5	1	2.1	2	3.5	9	16.3
Lame	--	-.-	--	-.-	8	16.6	8	14.0	10	18.2
Other Diseases	35	81.4	17	29.8	13	27.1	16	28.1	32	58.2
Pneumonia	4	9.3	31	54.4	20	41.7	16	28.1	4	7.3
Strangles	1	2.3	7	12.3	6	12.5	10	17.5	--	-.-
TOTALS	43	100.0	57	100.0	48	100.0	57	100.0	55	100.0

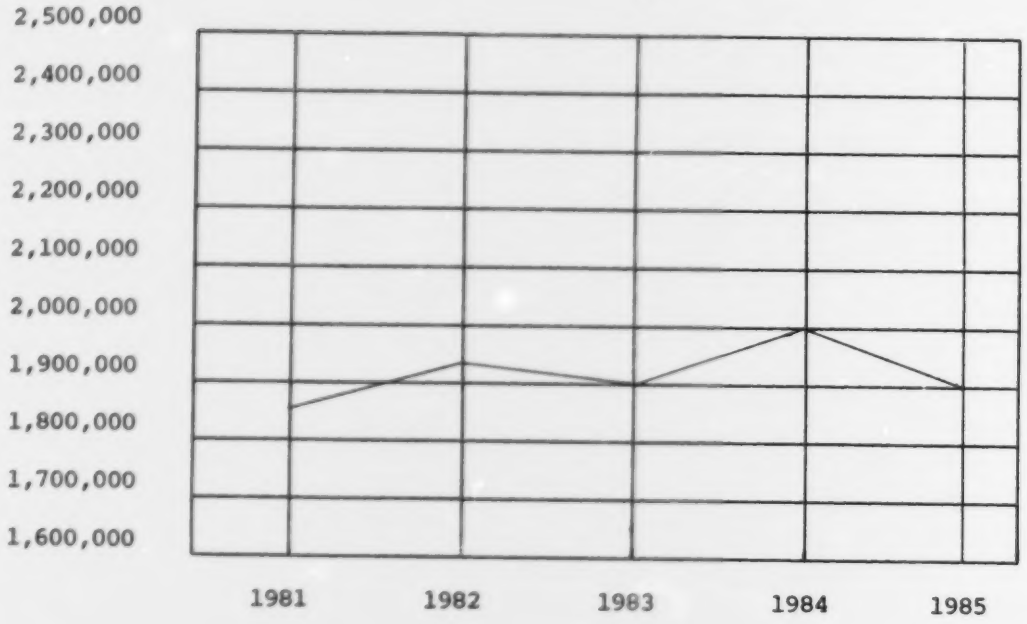
GOATS

Reasons for Rejection/Slaughter

	1981		1982		1983		1984		1985	
	No.	%	No.	%	No.	%	No.	%	No.	%
Lymphadenitis	1	4.8	17	89.8	7	36.8	6	23.1	5	12.2
Mastitis	2	9.5	--	-.-	1	5.3	7	26.9	11	26.8
Other Diseases	16	76.2	2	10.5	6	31.6	11	42.3	20	48.8
Pinkeye	--	-.-	--	-.-	--	-.-	--	-.-	1	2.4
Pneumonia	--	-.-	--	-.-	5	26.3	2	7.7	1	2.4
Skin Disease	--	-.-	--	-.-	--	-.-	--	-.-	3	7.4
TOTALS	21	100.0	19	100.0	19	100.0	26	100.0	41	100.0

1981 - 1985

TOTAL NUMBER OF LIVESTOCK INSPECTED AT AUCTION MARKETS



1985

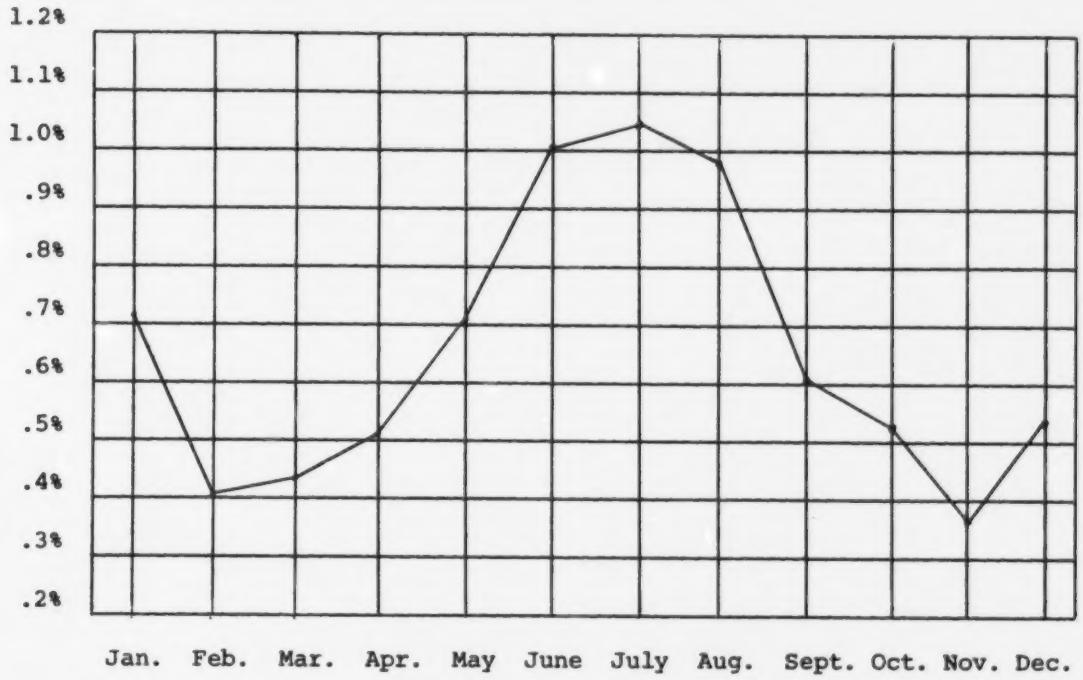
SUMMARY OF RESULTS OF VETERINARY INSPECTION

No. of Auction Markets - 46

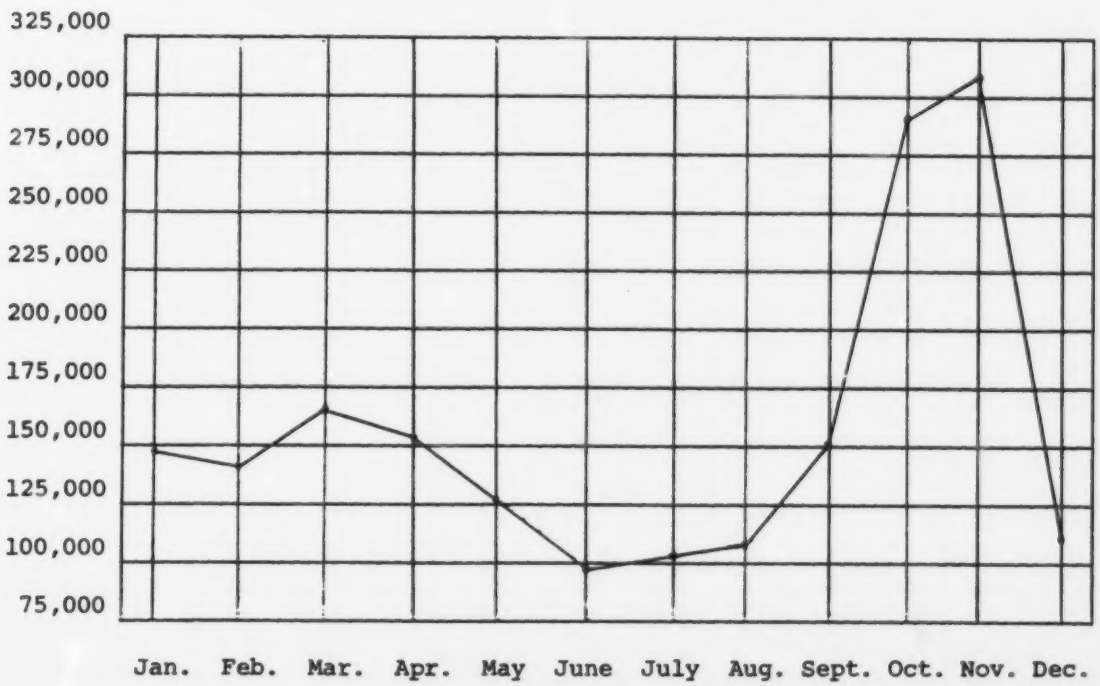
No. of Sales 3,333

	Inspected In 1985	Percentage Of 1984	Rejected At Sales		Slaughter Only Animals	
			No.	%	No.	%
Cattle	1,614,926	98.6	2,510	.2	3,304	.2
Goats	5,952	87.6	34	.5	5	.0
Horses	19,222	100.4	24	.1	23	.1
Sheep	24,777	84.4	73	.2	500	2.0
Swine	234,909	74.4	3,698	1.5	824	.3
TOTALS	1,899,786	94.6	6,339	.3	4,656	.2

AVERAGE REJECTION RATE FOR ALL ANIMALS INSPECTED - 1985



TOTAL ANIMALS INSPECTED IN 1985



MEAT HYGIENE BRANCH

During 1985 the Meat Hygiene Branch employed two Supervisors, 6 Regional Supervisors, one Clerk Typist and 34 Inspectors on a full time basis. We also employed 21 Inspectors and 107 Veterinarians on a part time basis.

Inspection was provided for 78 red meat plants and 85 poultry plants including 77 operated by Hutterite Colonies.

Livestock inspected during the year included 42,472 cattle, 74,837 hogs, 6,100 sheep, 1,393 goats, 106 buffalo, 18,270 rabbits, 2,239,318 broiler chickens and 254,011 fowl and 129,719 ducks, geese, turkeys and pheasants.

Cattle slaughter decreased marginally from previous years and hog slaughter increased marginally. All other classes of livestock showed a significant increase in volume.

Carcass condemnations for the year were approximately 1% for cattle, .76% for hogs, .5% for sheep, 1.75% for goats, and 1.8% for poultry. In addition 150,383 meat portions were condemned.

Enforcement activities continued during the year with approximately 50 possible violations being investigated. Most were found to be either not in violation or were persuaded to cease their activities. One charge was laid under the Meat Inspection Act, and a conviction was obtained. Other cases are still under investigation.

During 1985, amendments to the Meat Inspection Regulations were passed, which allow the Minister to give permission to individuals to operate as Mobile Butchers. These persons are permitted to travel from

farm to farm and slaughter animals on behalf of the farmer for that farmer's own use. No inspection is provided to these animals and carcasses or the meat obtained from them slaughtered in this way, are not eligible for sale. During 1985, 32 permits were issued to these businesses.

LIVESTOCK PREDATOR AND BEEYARD COMPENSATION PROGRAMS

These programs are administered in the division with decisions concerning compensation made by committees operating in the Peace River district processing claims from that area and in Edmonton for claims originating in the balance of the province. The committees are comprised of representatives from the Animal Industry Division, Crop Protection and Pest Control Branch, Animal Health Division, Fish & Wildlife Division, Plant Industry Division and farmers or beekeepers actively engaged in livestock production.

The programs are to compensate farmers suffering livestock losses through predation and beekeepers suffering bear damage.

The following table will summarize the claims processed, monies distributed and a breakdown of claims for the calendar year, 1985.

	PREDATORS	BEEYARDS
Claims:	751	31
Rejections:	173	13
Approvals:	578	18
Monies Paid	$176,849.40	$5,364.80

Predator Claims

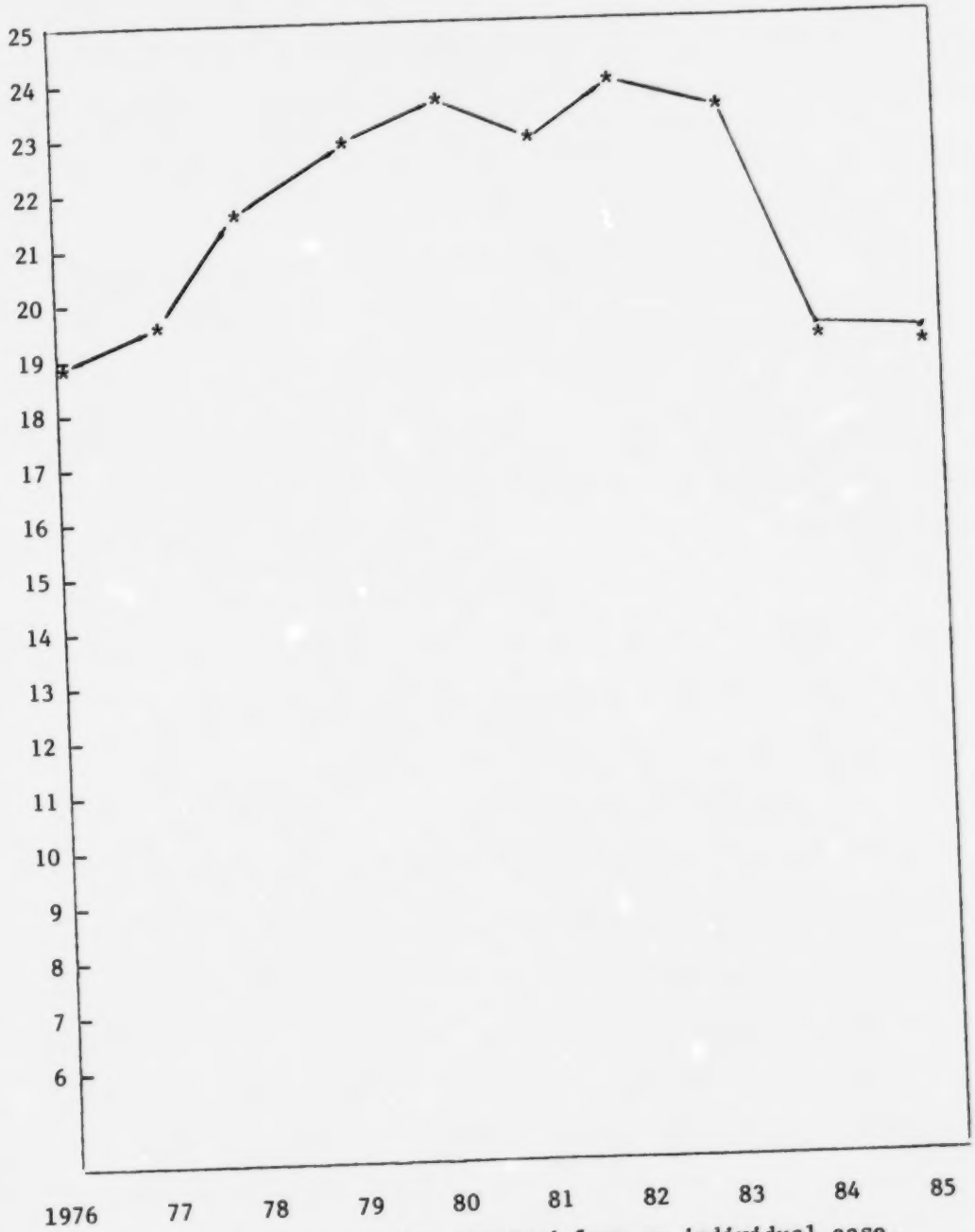
Bears	Coyotes	Wolves	Others
60	419	46	53

SPECIMENS EXAMINED

(By laboratory sections)

	1983	1984	1985
EDMONTON			
Animal	21,766	27,018	24,491
Poultry and Fish	15,080	15,645	13,484
Reproduction	2,778	2,581	2,774
Microbiology	22,681	29,037	22,776
Histology & E.M.	40,339	39,832	38,636
Parasitology	1,334	851	1,025
Toxicology	12,001	10,399	8,822
LETHBRIDGE			
Animal	8,414	7,758	7,931
Poultry and Fish	2,223	2,238	1,954
Microbiology	5,551	6,233	5,836
Histopathology	8,314	7,167	7,083
FAIRVIEW			
Animal	2,967	3,224	2,361
Poultry	538	302	307
Microbiology	2,634	2,044	2,077
Histopathology	3,588	5,709	5,772
AIRDRIE			
Animal	9,239	9,010	9,762
Poultry	5,157	3,992	3,891
Microbiology	8,047	9,189	7,501
Histopathology	23,122	22,757	22,293
	195,773	204,986	188,776

SUBMISSIONS IN THOUSANDS



Submissions refers to samples received from an individual case. A submission may consist of one or more carcasses, tissues, blood, or milk samples, etc.

PROMINENT DISEASES OF CATTLE

As was the case in 1984, respiratory disease in the form of pneumonia of all types was the most frequently diagnosed disease with 1706 cases, an increase of 47% over 1984 submissions. Diagnoses of interstitial pneumonia was 200% of those for 1984. Second in order of frequency was mastitis (276) followed by encephalitis, encephalopathy and meningitis (274), enteric disease (233), deficiency disease (179), and bloat (134). The encephalitis, encephalopathy, meningitis group increased in number to 164% of the 1984 figures.

There were 14 diagnoses of Johne's disease down from 24 the previous year. The 65 diagnoses of bovine virus diarrhea were similar in number to that of 1984.

Pasteurella hemolytica was the most frequently cultured disease causing bacteria followed in decreasing frequency by Staphylococcus aureus, E.coli, Hemophilus sp and Corynebacterium pyogenes. Recovery of Hemophilus sp increased 25% while that of E.coli decreased 25%.

Submissions of aborted feti numbered 1373, and 11% increase. Various bacterial infections were the most commonly diagnosed cause of abortions. Infectious bovine rhinotracheitis (IBR) virus infection was the most frequently diagnosed cause of abortion (56) and similar in number to 1984 figures.

Lead poisoning was the most frequently diagnosed toxicosis (42 positive analyses).

PROMINENT DISEASES - HORSES, SHEEP AND GOATS

In sheep, pneumonia was the most commonly diagnosed disease, followed by abscesses, bloat and polioencaphalomalacia. Inadequate milk intake coupled with chilling were responsible for the majority of neonatal losses.

In goats too, pneumonia was the most prominent disease followed by caseous lymphadenitis and nutritional disorders.

In horses, intestinal accidents such as torsions and ruptured stomachs were the most commonly diagnosed disease condition. These were followed by pneumonia, dermatitis and nutritional problems (mainly undernutrition). Streptococcus sp bacteria were most frequently cultured disease organism, followed by E.coli, Staphylocccus aureus, Actinobacillus sp and Corynebacterium sp.

PROMINENT DISEASES OF SWINE

Pneumonia of all types was the most commonly diagnosed disease condition with 461 cases, down 15% from those of 1984. This was followed by enteric colibacillosis with 285 cases and other enteric disease 140 cases, 42 of which were swine dysentery. Diagnoses of transmissible gastroenteritis decreased by 75% and there was a small decrease in diagnoses of Hemophilus pleuropheumoniae infection and mulberry heart disease.

PROMINENT DISEASES - POULTRY

Infectious Bursal disease related problems have declined rather dramatically. Serologic studies of breeder flocks indicated a very good post production titre. Necrotic enteritis caused occasional spike mortalities in some flocks of birds. The incidence of twisted legs declined in summer and early fall but seemed to increase again in late winter. Hepatosis condemnations were a concern at processing plants. Ascites losses have become significant in several broiler flocks and all flocks appear to have a few of these birds. Acute death syndrome and leg weaknesses are responsible for most losses. The poultry section was able to assist breeders and hatcheries with fertility and hatchability problems. Staphylococcal related leg problems were not as common as in previous years.

Production and shell problems relating to lighting and nutrition were identified in egg layers. The majority of the egg layer problems appeared to be management related.

Withdrawal of the antibiotic, Chloramphenicol, left turkey flocks susceptible to heavy losses from coliform septicemia. Resistance patterns were such that alternate drugs were not available. Many antibiotics are not in a form suitable for flock medication. Marked emphasis on environmental sanitation may help curtail losses.

Chlorination of water supplies is one such avenue being pursued by a number of producers. Aortic ruptures are not commonly seen, apparently being replaced by a renal hemorrhage syndrome.

A high prevalence of Staphylococcal arthritis in domestic ducks and geese was traced to foot injuries incurred while the birds grazed rye stubble.

SPECIAL INVESTIGATIONS 1985

ALBERTA POULTRY FLOCK HEALTH PROGRAM:

In cooperation with the poultry branch of the Animal Industry Division, enviromental monitoring of turkey breeder and chicken breeder flocks was conducted. Samples of cull chicks or poults from replacements as received from the primary breeders were examined for the presence of salmonella or other potential pathogens. Environmental samples were obtained from breeder farms as these flocks came into lay. Cull chicks were examined from first hatches obtained from these flocks. Hatchery fluff samples were cultured on a routine basis from all hatchers in the province. Hatcheries and multiplier flock owners were advised of salmonella isolations made on their premises and recommendations were made to prevent shedding and spread of salmonella contamination.

MORIBUND CYANOSIS IN BROILERS FOR SLAUGHTER:

In the 1984 calendar year, approximately 200,000 broilers were condemned as dead on arrival, bruising, moribund, or cyanosis at the two Edmonton Poultry Processing Plants. In conjunction with Dr. Lamoureux of the Food Production and Inspection Branch, a laboratory project was conducted to investigate these losses. Approximately 51% of the birds condemned for moribund had leg weakness problems. These were primarily tibial rotations and tibial angulations with a number of tibial dyschondroplasias and kinky backs. Approximately 48% of the birds submitted as condemned for cyanosis had leg weakness problems or

injuries such as fractures or burising. 10% of the birds were suffering from the ascites condition. From the project, it would appear that these birds suffering from leg weakness or ascites may be much more susceptible to transportation related injuries and ultimate condemnation.

HEPATITIS-HEPATOSIS EVAULATION IN BROILERS:

A number of broiler birds in the province are routinely condemned for a condition known as big liver or hard liver syndrome. Gross and histopathologic examination of a large number of these has been conducted during the year. Repeated examination has failed to show the presence of a significant infectious agent. None of the known ancillary lesions associated with aflatoxicosis have been seen in birds examined. Serologic examination of birds for evidence of adenovirus infection failed to implicate this agent. Similarly, there has been no correlation with the incidence of infectious bursal disease in these birds. Endocardiosis of heart valves has been noted but may be a secondary event. As yet, the etiology of this condition is obscure but there is a suggestion of a very low grade toxicity and this is being examined further.

INFECTIOUS BURSAL DISEASE SEROLOGIC INVESTIGATION OF BREEDER FLOCKS:

Early in 1985, Infectious Bursal disease began to be diagnosed in a number of broiler flocks. With adequate vaccination of breeders, this disease should not have been a problem. A serologic survey of breeder flocks was conducted. A survey of the majority of breeder flocks

indicated a low vaccination titre and thus a problem with the vaccination procedures. Following a meeting of the personnel of a major poultry company, vaccine problems were identified and implicated in the problem. Following implementation of recommendations, the problem has alleviated and again infectious bursal disease is not common in Alberta poultry.

DETECTION OF PEA AND SOY DERIVED PROTEINS IN CALF MILK REPLACERS:

During the continuing evaluation of malnutrition in dairy calves, differences in diseases were associated with different milk replacers. Using gel electrophoresis, contamination with pea and soy derived proteins was detected in products from which all milk proteins were to be used. Such contamination affects solubility, taste, and the absorption of protein within the neonatal gut. Disease syndromes precipitated included pneumonia, emaciation and enteritis and were in general reversible when the nutritional problem was corrected.

EVALUATION OF FLUORESCENT ANTIBODY TECHNIQUE FOR THE DIAGNOSIS OF TRANSMISSIBLE GASTROENTERITIS IN SWINE

The occurrence of apparent non-transmissible gastroenteritis corona viruses in swine precipitated an evaluation of the diagnostic techniques. Artificially infected pigs obtained from known uninfected premises were used. The trial demonstrated a very high degree of accuracy for the F.A.T.

EVALUATION OF A NEW ARTIFICIAL RESPIRATION SYSTEM FOR PREMATURE INFANTS:

In conjunction with Royal Alexandra and University of Alberta hospitals, postmortem examination of cats was completed to evaluate the effects of an external short stroke ventilation system for prolonged artificial respiration. Cats were evaluated histologically and microbiologically.

ASSESSMENT OF COUNTERIMMUNE ELECTROPHORESIS AND ELISA TESTING TO DETECT BACTERIAL KIDNEY DISEASE IN TROUT:

Fish were artificially infected with virulent Renibacterium salmoninarun bacteria and periodically sampled for testing by fluorescent antibody (as a control procedure), counterimmune electrophoresis (C18) and enzyme-linked immunosorbant assay (ELISA) to determine the presence of R. salmoninarun. The infection was easily reproduced and often lethal. The ELISA test for antigen shows considerable diagnostic promise.

EVALUATION OF ANTIBIOTIC SENSITIVITY TESTING IN BOVINE FEEDLOTS:

The Division's branches cooperated in the planning and funding with an Alberta feedlot and their veterinarian to evaluate the usefulness of antibiotic sensitivity testing. Transtracheal washes and nasal swabs were taken pretreatment, posttreatment and at death (when possible) and isolates of Pasteurella hemolytica, Pasteurella multocida and Hemophilus somnus were collected and saved. Subsequently, the Kirby Bauer technique and the minimum inhibitory concentration techniques of sensitivity testing were compared in the laboratory. All results, including clinical data, were computerized for analysis.

EVALUATION OF CATALYST ALTERED WATER ON BROILER CHICKENS:

Several barns were put on catalyst altered water or a control water and subsequently reversed when the flock was changed. All mortalities were collected and necropsied. The incidence of "flipovers" (Acute Death Syndrome) was unaffected by the catalyst altered water.

HATCHERY SANITATION MONITORING PROJECT:

In conjunction with Poultry Branch and the Federal government, a comparison of Rodac plate monitoring system was provided to hatcheries to monitor incoming egg and operation sanitation. Improvements were reflected in higher fluff sample ratings.

COMPARISON OF LABORATORY ANALYSIS OF CALCIUM AND PHOSPHORUS:

Analysis of feeds for calcium and phosphorus is often done in more than one laboratory during investigations. A project was set up to compare interlaboratory results. The results indicated close and accurate correlation of calcium and some variation in phosphorus analysis.

THE ROLE OF WATER DEPRIVATION IN THE DEVELOPMENT OF BABY CHICK NEPHROPATHY SYNDROME:

After several investigations into visceral gout in young chicks, there was some suspicion that the dehydration began before hatching. Eggs were incubated at normal humidity and after 5 days of water deprivation chicks were necropsied to assess the level of dehydration and degree of nephrosis.

Water deprivation did not contribute to or reproduce the baby chick nephropathy seen in field cases.

HEALTH STATUS OF BIGHORN SHEEP IN THE KOOTENAY NATIONAL PARK:

Forage date of winter and summer range were analyzed and evaluated in view of the stocking density.

There was a steady increase in fecal excretion of lungworm larvae which might indicate increase in stress level. Fecal samples were collected throughout the year, identified by age group and sex, and are to be analyzed for cortisol. The aim is to correlate fecal cortisols with lungworm output and occurrence of pneumonias or other stress related mortality.

EXPERIMENTAL PASTEURELLOSIS IN BIGHORN SHEEP (BHS):

Pasteurella isolates recovered from the 1982/83 die off in Alberta were inoculated intratracheally into captive BHS and domestic sheep. Lobar fibrinous bronchopneumonia resulted in BHS while domestic sheep developed no lesions nor could the organism be recovered.

BHS inoculated with isolates recovered from the nose of normal domestic sheep died within 1½ to 2 days with pneumonia. BHS were also found to be very sensitive to modified Pasteurella type A used as a cattle vaccine. Intradermal injection resulted in mortality in 3 days.

MELATONIN IMPLANTS IN MINK:

The furring cycle was sped up by injecting slow release melatonin implants into 4000 demi-buff mink. The animals furred out 4 weeks earlier, had a large body size and produced a good quality pelt. There was no appreciable color change. Blood samples are being analyzed at the University of Saskatchewan for melatonin and progesterone. Histologic examination of endocrine organs and gonads are being done.

MELATONIN IMPLANTS IN SILVER FOXES:

In cooperation with the University of Saskatchewan, six silver foxes were implanted with slow release melatonin. The animals appeared to reach prime 5 weeks ahead of controls. One month later they decreased their food intake and changed to a perceivably thinner coat. Their reproductive activity is being monitored together with melatonin and testosterone blood levels. The implants will be studied a second year before recommendations can be made to fur ranchers.

ACQUIRED INFERTILITY IN MALE MINK:

Infertility in male mink occurs with a prevalence of about 12%. Much of this problem is acquired by males who produced the previous year. Gonad tissue was collected for histologic examination primarily to determine "normal" background lesions. This study will continue in 1986.

EVALUATION OF HUMANE TRAPS:

In cooperation with Fish and Wildlife, pathologic changes were assessed,

aided by radiographs, to determine the extent of damage produced by experimental humane leg hold traps on a variety of wild animal species. (To be continued into 1986).

ARTIFICIAL INSEMINATION IN FOXES:

A slide set was prepared and presented to fox ranchers on our preliminary work in A.I. and semen collection techniques. The semen laboratory at Airdrie is cooperating in quantitation and morphologic diagnoses of sperm quality. (To be continued into 1986).

QUANTITATION OF LUNGWORMS IN BIGHORN SHEEP (BHS):

Techniques developed in previous years were applied to quantitate adult and larval forms of Protostrongylus stilesi in BHS lungs. The data will correlate lungworm lesions with number of lungworms and fecal larval output. (This very labour intensive procedure is carried out under a grant from the Recreation, Parks and Wildlife foundation and will continue into 1986).

PREPATENT PERIOD OF BIGHORN SHEEP LUNGWORM P. STILESI:

Lungworm free bighorn sheep were obtained from a zoo and treated with Ivermectin to reduce intestinal parasitism. Laboratory reared snails containing the infective third stage larvae were introduced into the rumen. Fecal larval output was monitored and prepatent period of 43± 1 day established. A control sheep remained negative. This experiment will be repeated in 1986. The work was supported in part by the R.P.W. grant.

VALVULAR ENDOCARDIOSIS IN ASCITIC BROILERS:

Ascites is becoming a frequent cause of mortality in older broiler chickens. The causes remain unknown but the lesions are interpreted in this laboratory as a cardiovascular problem. In a survey, consistent finding was variable dilation of the right ventricle causing valvular insufficiency expressed as nodular endocarditis. This lesions is likely secondary to the dilation and the result of disrupted laminar blood flow.

PHOTOSENSITIZATION:

Scattered cases of photosensitization in brood cows occurred in the spring and early summer in the short grass prairie region south of Medicine Hat. While only a few cows died, many appeared to be affected and on one lease approximately 50 cows required attention. It is thought that the problem is brought on by the cows eating certain weeds which are primary photosensitizers (i.e. they have the capacity to cause disease in the absence of liver damage). A visit to some of the affected herds was made in an attempt to identify the offending plant or plants, but recognizable photosensitizers could not be detected.

BOVINE VIRUS DIARRHEA:

In early December 1985, a southern Alberta rancher experienced an outbreak of BVD in a group of 220 weaned calves derived from his own herd. A total of 29 animals died of classical BVD during the next three months. Investigations revealed that, except for the addition of bulls,

the herd had been essentially closed for many years. In the summer of 1984, however, the owner had introduced a number of heifers that were bred and subsequently sold. It seems likely that one or more of these heifers was the source of BVD virus that infected susceptible cows of the breeding herd while they were in the range of 40-125 days pregnant. Over the ensuing winter there were no abortions, and at calving all animals born were clinically normal. Problems did not begin until after calves were weaned, when the outbreak began in early December. BVD virus was isolated from tissues of some of the animals dying of the disease, but was not isolated from buffy coat or serum of affected calves or from cows that lost calves to BVD infection.

MALIGNANT CATARRHAL FEVER:

An unusual outbreak of Malignant Catarrhal Fever was encountered in a dairy herd. The disease caused the death of 13 of 56 adult cows. Some of the animals were found dead without having been observed sick, some died after an illness of 24-36 hours and others lingered for 3 weeks. Blindness was observed in 2 cows. The cows had contact with feeder sheep pruchsed 4 months previous to the outbreak. Four weeks following removal of the sheep, no new cases developed. For unknown reasons the disease confined itself to cows in their second and third lactation.

AGING OF PASTEURELLA PNEUMONIA:

A study was conducted into the aging of Pasteurella pneumonia with the view of being able to give the practitioner and his feedlot clients a

more accurate indication of the duration of the pneumonia in order to make management decisions.

BACTERIAL ISOLATES FROM TRANSTRACHEAL WASHES & NASAL SWABS:

A study was conducted to compare the recovery of bacterial isolates by transtracheal washes and nasal swabs from feedlot calves. The recovery rate of Pasteurella hemolytica was not significantly different while the recovery rate of Hemophilus somnus was higher from the transtracheal washes.

ANALYSIS OF SPRING THRESHED GRAIN FOR MYCOTOXINS:

In cooperation with Regional Extension staff and staff of the Environmental Centre, samples of spring threshed grain were analysed for the presence of mycotoxins. Mycotoxins were not detected in any of the samples analysed.

SURVEY OF TRYPANOSOMES IN CATTLE IN ALBERTA:

A survey of blood samples taken from cows from a packing plant in Alberta demonstrated that 50-70% of the animals were infected with Trypanosoma theileri. Although the prevalence was high, the flagellate was rarely observed in blood smears, but was easily cultured. This parasite had not been previously reported in cattle in Alberta.

SURVEY OF COCCIDIA IN CATTLE IN ALBERTA:

Fecal samples were taken from 131 cattle submitted to the Provincial

Veterinary Laboratory in Edmonton, and analyzed for coccidia. The survey showed that at least nine species of Eimeria occurred in cattle in Alberta. Five of these had not previously been reported from Alberta. Approximately 65 percent of the cattle examined contained one or more species of coccidia. The average number of oocysts found in each sample was usually less than 25 oocysts per gram.

SURVEY OF ECTOPARASITES OF CATTLE IN ALBERTA:

Samples of skin scrapings were taken from cattle submitted to the Provincial Veterinary Laboratory in Edmonton, and examined for ectoparasites. Sixty four percent of the animals examined were infected with one or more of the seven species of ectoparasites found. Approximately six percent of the cattle were infected with a mite, Psorergates bos, not previously reported in catle from Canada.

Mycotoxins

In Alberta, the principal mycotoxins that may have been produced in moldy grain were the cool climate, Fusarium -produced, trichothecenes. Several trichothecenes are known to be capable of causing animal disease. These are diacetoxyscirpenol, hydroxy T-2, T-2, and deoxynivalenol. Concern was raised because of previously identified mycotoxin problems in the Peace River country and the occurrence of overwintered grain creating a substrate for fungal growth. The mycotoxin project was devised with Alberta Environmental Centre in which AEC undertook the microbiologic culture and speciation of fungi and the Alberta Agriculture laboratory did the chemical analysis for the mycotoxins. Trichothecene analysis was extremely difficult requiring ultimate sophistication of methodology and instrumentation. This was primarily related to extraction procedures and the fact that detection cannot be achieved through fluorescence techniques. To achieve the analytic capabilities, a gas chromatograph with electron capture detector and capillary column was purchased along with a data centre to operate the instrument and a companion high pressure liquid chromatograph. The methodology and techniques were adopted from training sessions with the Food Production and Inspection Branch Laboratory of Canada Agriculture. Within a period of four months, mycotoxin results were onstream and numerous project samples and diagnostic samples were analyzed during the year.

The range of mycotoxin detection capability was expanded by refurbishing old equipment and using thin layer chromatography with a fluorescence

spectrophotometer plate reader. Analysis for aflatoxins was done also. This technique was utilized in screening procedures for a variety of other mycotoxins such as patulin, ochratoxin, citrinin, and zearalenone.

Vitamin A Determination Project

Laboratory analysis in the area of nutrition was a very prominent activity for the toxicology section. One of the major nutrients considered commonly deficient in the province was Vitamin A. Analysis of Vitamin A in blood serum was always difficult as previous techniques required 20 ml. of serum. With the purchase of the HPLC chromatograph, a more accurate technique requiring only four ml. of serum was introduced and Vitamin A analysis was routinely performed. This capability was unique in western Canada and Vitamin A analysis was routinely performed for the Western College of Veterinary Medicine as well as for some of the institutions in other provinces.

Fanweed - Allyliosothiocyanate (Stinkweed Project)

The drought period in southern Alberta created bizarre circumstances wherein bales of stinkweed were fed to cattle resulting in deaths. The toxic compound was identified as an allyliosothiocyanate and the analytic technique for examining for this product was developed in the

laboratory and offered as a routine test. A publication has resulted from this activity. Consultation was provided to officials in British Columbia where similar experiences required this analytic capability.

Pesticide Marker Project

Strychnine was a constant cause of poisoning in dogs and other animals. Official pest control officers of the department occasionally were accused of being responsible for the death of these animals. The marker project was developed for the protection of the officers, in order to establish that the strychnine used was not from the department. The project required formulating materials for the baits as well as the introduction of a chemical marker that could be detected through our routine analysis of stomach content and/or tissue samples from poisoned animals. In addition, a different marker was also included with the poison called 1080 (sodium fluoracetate) which gives an advantage because 1080 is difficult to diagnose by analysis and the marker provides the opportunity to identify the "labelled" poison.

1080 Technique Investigation

There was great difficulty in diagnosing death due to 1080 poisoning. Poisoned animals vomit and stomach contents were usually not available for analysis. The chemical must be absorbed, metabolized and changed into a non-detectable toxic form before the poison is effective. This

created great difficulty for the chemist in performing diagnostic analysis. In co-operation with Alberta Environmental Centre, rats were poisoned with 1080 and the stage and limits were determined at which the sodium fluoracetate could be detected and it was determined whether or not it was significant to look for citric acid levels in muscle.

Plant Alkaloids Project

A variety of plant poisonings occurred during the summer, especially in cattle and large animals. A project was undertaken to institute a uniform extraction and analysis procedure which would identify most of the toxic alkaloids of plants present in Alberta. The alkaloids in Alberta larkspur were found to contain different chemicals to those reported in the literature from other parts of North America. The characterization and identification of these larkspur alkaloids permitted an accurate diagnosis. Further investigation was made into sparteine and lupenines and these were characterized sufficiently so that stomach contents could be fractionated and analyzed so as to determine whether death was due to plant alkaloids.

Cicutoxin

Cicutoxin is the toxin in water hemlock which is probably responsible for the majority of plant poisoning deaths in cattle in Alberta. The diagnosis of this poisoning has been extremely difficult. Previously it

was difficult to find the toxin in the rumen contents because of a dilution factor. The test was time-consuming, cumbersome, and expensive. We developed a more simplified, accurate, and incredibly more sensitive test in which cicutoxin can be identified in the rumen content.

Anabena Floss Aquae VFDF

Blue green algae commonly grew in dugouts during the summer throughout Alberta and deaths were associated with this toxic bloom that produces an alkaloid known as the very fast death factor, VFDF. Death of a number of bats associated with this condition in one of these dugouts resulted in an investigation into the analytic techniques for the toxin and to the development of a simplified method for the analysis.

PROFESSIONAL PUBLICATIONS - 1985

1. Bauck, S. and Stone, M.W. 1985. The Diagnosis of TGE Infection in Swine Herds. Canadian Veterinary Journal 26: 230.
2. Daoust, P.-Y. and H.W. Ferguson, 1985, Nodular gill disease: a unique form of proliferative gill disease in rainbow trout, Salmo gairdneri Richardson. Journal of Fish Diseases 8: 511-522.
3. Dies, K.H. and J. Pritchard. 1985. Bovine Stephalofilarial Dermatitis in Alberta. Can. Vet. J. 1985; 26: 361-362.
4. Frelier, P.F., L. Sigler, P.E. Nelson. 1985. Mycotic Pneumonia Caused by Fusarium moniliforme in an alligator. To be published. Sabouradia.
5. Harries, W.N., G.A. Chalmers and G. Papp-Vid. 1985. Acute Bovine Respiratory Synctial Viral Respiratory Disease in Beef Calves. The American Association of Veterinary Laboratory Diagnosticians, 28th. Annual Proceddings, V.15, 22.
6. Kennedy, M.J., M.W. Lankester, and J.B. Snider, 1985, Paramphistomum servi and Paramphistomum liorchis (Digenea: Paramphistomatidae) in Moose, Alces alces, from Ontario, Canada. Canadian Journal of Zoology, Vol 63. Number 5: 1207-1210.
7. Onderka, D.K. and M.C. Finlayson, 1985. Salmonellae and Salmonellosis in Captive Reptiles. Can.J. Comp.Med. 49: 268-270.
8. Rousseaux, C.G., G.G. Klavano, E.S. Johnson, T.K. Shnitka, W.N. Harries, and F.F. Snyder, 1985. "Shaker" Calf Syndrome: A Newly Recognized Inherited Neurodengenerative Disorder of Horned Hereford Calves. Vet.Pathol. 22: 104-111.

TRADE PUBLICATIONS - 1985

1. Stone, M.W., Vaccines Available for Swine I. Western Hog Journal, Winter 1985.
2. Stone, M.W., Streptococcus suis Type 11 Infection. Western Hog Journal, Spring 1985.
3. Stone, M.W., Disinfection Part 1. Western Hog Journal, Summer 1985.
4. Stone, M.W., Disinfection Part 11. Western Hog Journal, Fall 1985.

ALBERTA AGRICULTURE PUBLICATIONS

1. Klavano, G.G. Don't leave cows in second stage labor. Agri-News, March 1985.

2. Kennedy, M.J. Sarcoptic Mange in Cattle. Agri-fax, Agdex 663-27, July 1985.

3. Kennedy, M.J. Parasites of Sheep. Agri-fax, Agdex 430/652-1, April 1985.

4. Kennedy, M.J. Coccidiosis in Dogs. Agri-fax, Agdex 663-32, December 1985.

5. Kennedy, M.J. Giardia in Dogs. Agri-fax, Agdex 663-31, December 1985.

6. Kennedy, M.J. Chorioptic Mange in Cattle. Agri-fax, Agdex 663030, December, 1985.

7. Kennedy, M.J. Trypanosoma theileri, Agdex 663-29, September 1985.

8. Perry, A.W. Blue Green Algal Poisoning of Cattle. Agri-fax; Agdex 664-4, December 1985.

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABOMASITIS	10	10	0	5	25
ABSCESS	11	9	1	2	23
BRAIN	7	2	1	2	12
CERVICAL	0	1	0	0	1
LIVER	10	9	3	8	30
ACTINOBACILLOSIS	1	0	0	0	1
ACTINOMYCOSIS	0	0	1	2	3
ANAPHYLAXIS	1	2	0	3	6
ANEMIA					
HEMORRHAGE	9	11	7	2	29
OTHER	7	2	1	1	11
ANOMALY	0	3	0	0	3
ALIMENTARY	1	2	1	4	8
BRAIN	1	0	0	0	1
CARDIOVASCULAR	23	4	9	2	38
MULTIPLE	26	2	1	0	29
MUSCULOSKEKLETAL	22	2	1	2	27
NERVOUS	2	0	1	0	3
SKIN & APPENDAGES	1	0	1	1	3
UROGENITAL	2	0	1	0	3
ANOXIA	3	1	7	1	12
AORTIC RUPTURE	1	0	0	0	1
ARTERIOSCLEROSIS	3	0	0	0	3
ARTHRITIS					
BACTERIAL	2	1	0	1	4
CHRONIC	0	2	0	1	3
CORYNE	1	0	0	1	2
FIBRINOUS	0	2	0	0	2
POLY	2	12	0	0	14
SUPPURATIVE	3	7	0	0	10
UNKNOWN	0	3	0	1	4
ARTHROGRYPOSIS	1	0	3	0	4
ASPERGILLOSIS	10	0	0	0	10

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ASPHYXIATION	0	2	0	2	4
ATRESIA COLI	0	0	0	1	1
BACTERIA					
ACTINOBACILLUS SP	0	0	0	2	2
ACTINOMYCES SP	1	0	0	0	1
BACILLUS SP	28	0	0	0	28
BACTEROIDES	1	0	0	0	1
CORYNE PYOGENES	19	16	5	20	60
CL CHAUVEI	13	0	0	1	14
CL PERFRINGENS	2	0	1	0	3
CL SEPTICUM	2	0	0	0	2
CL SORDELLI	0	0	1	0	1
CLOST SP	1	0	0	0	1
CORYNE SP	21	0	4	7	32
E COLI	4	33	7	44	88
FUSOBACTERIUM NECROPHORUM	2	0	0	1	3
HEMOPH SOMNUS	31	30	3	13	77
HEMOPHILUS SP	1	3	1	2	7
KLEBSIELLA	1	0	1	1	3
LISTERIA MONOCYTOGENES	0	1	1	0	2
MIXED CULTURE	0	0	0	1	1
MORAXELLA SP	2	2	1	4	9
MYCOB PARA	1	0	0	0	1
PAST HEMOLYTICA	129	67	0	10	206
PAST MULTOCIDA	24	16	2	4	46
PAST SP	3	3	0	0	6
PROTEUS SP	2	0	0	0	2
PSEUDOMONAS SP	8	2	2	0	12
SERRATIA	2	1	0	0	3
SHIGELLA SP	0	1	0	0	1
STAPH AUREUS	63	26	37	0	126
STAPH SP	3	5	0	2	10
STREP A HEMO	7	0	0	0	7
STREP AGALACTIA	10	9	2	0	21
STREP DYSGALACTIAE	13	7	13	1	34
STREP EQUI	0	0	0	1	1
STREP SP	15	4	1	8	28
STREP UBERIS	14	4	3	0	21
STREP ZOOEPIDEMICUS	0	3	0	0	3
YERSINIA	1	0	0	0	1
BACILLHEMOGLOBINURIA	0	0	0	1	1

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
BLACKLEG	30	7	1	2	40
BLOAT	35	32	34	33	134
BLOOD TEST NEG	31	0	0	0	31
BLOOD TEST POS	28	0	0	2	30
BOVINE VIRUS DIARRHEA	12	21	10	22	65
BRONCHITIS	1	4	1	0	6
CARDIAC FAILURE	16	14	15	9	54
CARDIOMYOPATHY	8	11	1	6	26
CELLULITIS	9	4	0	2	15
CHILLING	2	2	1	0	5
CHRONIC RESPIRATORY DISEASE	1	0	0	0	1
COCCIDIOS					
CECAL	2	0	0	0	2
INTESTINAL	10	15	6	5	36
COLD INJURY	5	0	9	0	14
COLITIS	8	10	0	1	19
CONJUNCTIVITIS	0	0	0	1	1
CYST	0	0	1	0	1
EPIDERMOID	1	0	0	0	1
OVARIES	1	0	0	0	1
CYSTITIS	2	1	0	1	4
DEFICIENCY					
CAL PHOS IMBALANCE	0	5	0	0	5
CALCIUM	79	0	0	0	79
COPPER	9	5	1	0	15
IODINE	6	0	1	2	9
MAGNESIUM	7	1	0	0	8
MALNUTRITION	3	7	3	12	25

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
DEFICIENCY (Continued)					
OTHER	0	1	0	0	1
PHOSPHORUS	58	1	0	0	59
SELENIUM	20	9	0	0	29
STARVATION	0	0	11	4	15
VIT A	7	2	0	8	17
VIT E	0	1	0	0	1
DEHYDRATION	7	17	6	1	31
DERMATITIS	11	3	2	0	16
MYCOSIS	1	0	0	0	1
DERMATOMYCOSIS	1	0	0	0	1
DISSEMINATED INTRAVASCULAR COAGULATION	0	0	0	2	2
DOWNER COW SYNDROME	1	0	0	0	1
DYSTOCIA	41	12	6	18	77
ELECTROCUTION	0	0	0	1	1
EMACIATION	10	31	7	8	56
ENCEPHALITIS					
H SOMNUS	18	30	2	35	85
NONSUPPURATIVE	2	4	0	6	12
OTHER	19	1	0	3	23
SUPPURATIVE	5	2	0	2	9
ENCEPHALOPATHY OTHER	0	3	4	7	14
ENDOCARDITIS	6	9	0	2	17
ENDOMETRITIS	1	1	0	0	2
ENTERIC COLIBACILLOSIS	34	18	2	40	94
ENTERITIS					
CATARRHAL	0	0	0	2	2
CHRONIC	1	3	2	1	7
CLOSTRIDIUM SP	0	1	2	1	4
GRANULOMATOUS	0	1	0	0	1
HEMORRHAGE	0	2	3	4	9

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ENTERITIS (Continued)					
NECROTIC	4	15	1	2	22
NUTRITIONAL	1	0	0	0	1
PARASITE	1	0	0	0	1
PROTOZOA	0	0	0	1	1
ULCERATIVE	1	0	0	0	1
UNKNOWN	62	13	2	12	89
VIRAL	67	8	7	3	85
ENTEROTOX C	0	0	0	2	2
ENTEROTOX D	0	1	0	0	1
EOSINOPHILIC MYOSITIS	0	1	0	1	2
EPITHELIOGENESIS IMPERFECTA	0	0	0	1	1
EROSION EPITHELIAL	1	0	0	0	1
EXPERIMENTAL	0	0	0	1	1
FAT NECROSIS	0	0	0	1	1
FATTY LIVER SYNDROME	1	1	0	0	2
FEED ANALYSIS	1	3	0	0	4
FIBROSIS	2	1	0	0	3
FOOT ROT	1	0	0	2	3
FOR CULTURE	13	67	119	0	199
FOR CYTOLOGY	1	0	1	0	2
FOR HEMATOLOGY	25	0	13	1	39
FOR IDENTIFICATION	19	1	2	4	26
FOR SEROLOGY	2	0	0	0	2
FOR URINALYSIS	0	0	3	1	4
FRACTURE	1	0	1	1	3

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
GASTRITIS	2	0	0	0	2
GASTROENTERITIS	0	0	0	1	1
GLOSSITIS	1	0	0	0	1
GOITRE	1	1	0	2	4
GRANULATION TISSUE	0	1	0	2	3
GRANULOMA	5	0	1	0	6
GROWTH HYPERPLASIA	3	0	0	0	3
GROWTH INFLAMMATION	9	1	0	3	13
HEMATOMA	2	1	1	0	4
HEMORRHAGE DISEASE	0	0	0	1	1
HEPATIC					
CIRRHOSIS	2	0	0	1	3
FIBROSIS	2	4	1	1	8
LIPIDOSIS	4	1	0	4	9
NECROSIS	6	9	0	1	16
HEPATITIS	4	5	0	0	9
BACTERIAL	0	1	0	1	2
NECROTIC	1	4	0	0	5
TOXIN	2	0	1	1	4
UNKNOWN	8	0	0	0	8
HERNIA					
DIAPHRAGMATIC	1	0	0	0	1
SCROTAL	0	1	0	0	1
HYDROCEPHALUS	2	1	1	4	8
HYDRONEPHROSIS	2	0	0	1	3
HYDROPS AMNII	1	0	0	0	1
HYPERKERATOSIS	0	0	0	1	1

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
HYPERPLASIA					
BILIARY	0	1	0	0	1
THYROID	0	0	0	1	1
HYPOCALCEMIA	5	7	1	2	15
HYPOMAGNESEMIA	1	1	0	0	2
HYPOMYELINOGENESIS CONGENITA	1	0	0	0	1
HYPOPLASIA CEREBELLAR	2	0	1	1	4
INFECTIOUS BOVINE RHINOTRACHEITIS					
NEONATAL	0	2	0	0	2
OTHER	8	0	1	2	11
RESPIRATORY	9	5	0	5	19
ICTERUS	1	1	0	1	3
IMPACTION	1	2	0	0	3
INDIGESTION	2	0	1	0	3
INFARCT	2	1	0	4	7
INTUSSUSCEPTION	2	5	0	1	8
JOHNES DISEASE	5	9	0	0	14
KERATITIS	1	0	0	0	1
KERATOCONJUNCTIVITIS	0	0	1	2	3
LAB EXAMS NEGATIVE	16	281	63	203	563
LAMINITIS	1	0	0	0	1
LARYNGITIS	1	4	2	1	8
LARYNGOTRACHEITIS	1	0	0	0	1
LEPTOSPIROSIS	0	0	0	1	1
LEUKOENCEPHALOMALACIA	0	0	1	0	1

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
LEUKOSIS					
LYMPHOID	0	1	0	0	1
UNDIFFERENTIATED	1	0	0	0	1
LIGHTNING STROKE	0	1	0	0	1
LISTERIOSIS	3	0	0	1	4
LYMPHADENITIS	1	4	0	0	5
MALIGNANT CATARRHAL FEVER	2	3	0	3	8
MALIGNANT EDEMA	0	3	0	1	4
MASTITIS	103	3	1	6	113
COLIFORM	10	2	2	19	33
PASTEURELLA	2	0	0	0	2
PSEUDOMONAS	1	2	0	0	3
STAPHYLOCOCCUS	8	21	8	53	90
STREPTOCOCCAL	4	5	6	20	35
MENINGITIS	13	4	2	2	21
BACTERIAL	6	1	7	1	15
UNKNOWN	0	0	0	1	1
MENINGOEN NONSUPPURATIVE	2	0	0	0	2
MENINGOEN SUPPURATIVE	9	0	2	0	11
METRITIS	3	0	2	4	9
MISMANAGEMENT	1	0	0	2	3
MISCELLANEOUS LAB FINDINGS					
Bones and joints	0	3	0	1	4
Circulatory	4	4	0	3	11
Digestive	5	14	1	16	36
Eye & Ear	1	2	0	0	3
Hematopoietic	2	0	0	1	3
Liver	4	1	0	3	8
Muscle	4	0	0	1	5
Nervous	2	4	0	1	7
Other	2	4	0	15	21
Reproductive	2	7	0	2	11
Respiratory	15	5	0	4	24

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
MYCO					
Aspergillus	1	0	0	2	3
Mucor	6	0	0	0	6
Rhizopus	1	0	0	0	1
Trichophyton	2	0	0	1	3
Yeast	5	0	1	1	7
MYCOPLASMA SP	1	0	0	0	1
MYCOSIS	2	0	1	2	5
MYELITIS	2	1	0	0	3
MYOCARDITIS	12	22	3	20	57
MYOPATHY	11	3	1	4	19
NUTRITIONAL	15	7	3	0	25
MYOSITIS	12	5	0	0	17
NECROBACILLOSIS	4	0	0	1	5
NEGATIVE SALMONELLA	2	2	0	59	63
NEO NATAL DIARRHEA	64	19	0	2	85
NEPHRITIS					
EMBOLIC	3	0	0	0	3
GLOMERULO	1	0	0	1	2
INTERSTITIAL	16	1	1	3	21
OTHER	3	0	1	0	4
PYELO	10	8	5	6	29
NEOPLASMS (See table)					
NEPHROSCLEROSIS	1	0	0	0	1
NEPHROSIS	7	1	2	0	10
NO DIAGNOSIS	452	97	9	41	599
NO TEST	18	1	3	0	22
NO VISIBLE LESION	96	4	0	28	128
NOCARDIOSIS	1	0	0	0	1

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
NORMAL TISSUE	12	1	2	4	19
OBSTRUCT INTESTINAL	0	1	1	0	2
OMPHALITIS	5	1	1	2	9
OMPHALOPHLEBITIS	16	9	0	1	26
ORCHITIS	2	0	0	0	2
OSTEOMYELITIS	1	6	0	0	7
PARASITISM (See table)					
PENDING	1	0	0	0	1
PERICARDITIS	6	7	3	2	18
PERITONITIS	29	22	10	17	78
PHOTOSENSITIZATION	0	1	0	2	3
PLEURITIS	7	26	1	4	38
SUPPURATIVE	1	1	0	0	2
PNEUMONIA					
ATYPICAL INTERSTITIAL	35	9	18	43	105
BACTERIAL	14	4	0	30	48
BRONCHO	90	67	16	34	207
CHRONIC NONRESOLVING	51	37	2	21	111
ENZOOTIC	0	0	0	1	1
FIBRINOUS	122	411	12	82	627
GANGRENOUS	0	0	0	1	1
GRANULOMATOUS	1	0	0	0	1
HEMOPHILUS	15	5	2	3	25
INHALATION	30	9	5	4	48
INTERSTITIAL	89	84	2	13	188
MYCOTIC	2	1	0	1	4
OTHER	35	17	2	8	62
PARASITIC	0	1	0	1	2
PASTEURELLA	81	39	15	62	197
SUPPURATIVE	1	28	3	6	38
VIRAL	25	10	0	6	41

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
POLIOENCEPHALOMALACIA	13	8	1	12	34
POLYSEROSITIS	1	2	0	0	3
POSITIVE SALMONELLA	0	0	0	1	1
PROLAPSE RECTUM	0	0	1	0	1
PULMONARY					
EDEMA	18	33	4	18	73
EMBOLISM	4	0	0	0	4
EMPHYSEMA	0	2	1	3	6
FIBROSIS	5	1	0	0	6
THROMBOSIS	1	0	0	0	1
PYOMETRA	0	1	2	0	3
PYOTHORAX	0	0	1	0	1
RABIES NEGATIVE	5	0	1	0	6
RETICULITIS TRAUMATIC	4	3	2	1	10
RHINITIS	1	0	0	0	1
RUMEN OVERLOAD	9	15	1	8	33
RUMENITIS	12	5	0	4	21
MYCOTIC	4	2	1	1	8
RUPTURE					
BLADDER	1	0	0	1	2
SPLEEN	0	1	0	0	1
STOMACH	1	1	0	2	4
URINARY BLADDER	0	0	1	0	1
UTERUS	1	0	0	0	1
SALMONELLA SP	2	2	0	3	7
SALMONELLOSIS	3	0	0	10	13
SARCOSPORIDIOSIS	2	0	0	0	2
SEMEN EVALUATION	1	0	0	0	1
SENSITIVITY EXAM	0	0	0	1	1

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
SEPTICEMIA					
E COLI	16	5	8	7	36
PASTEURELLA	2	3	5	3	13
PSEUDOMONAS	0	1	0	0	1
STAPHYLOCOCCUS	1	0	0	0	1
STREPTOCOCCAL	1	0	2	0	3
UNKNOWN	40	9	5	8	62
SINUSITIS	0	0	1	0	1
SPECIMEN UNSUITABLE	25	23	2	9	59
STARVE OUT	0	0	1	3	4
STILLBORN	0	14	34	5	53
STOMATITIS	1	1	0	5	7
SUITABLE FOR HUMAN USE	2	1	2	3	8
SYNOVITIS	1	1	0	0	2
TORSION					
ABOMASUM	4	3	1	0	8
INTESTINAL	9	8	0	2	19
MESENTERIC	3	5	0	12	20
OTHER	1	1	0	1	3
STOMACH	1	0	0	0	1
TOXICOSIS (See table)					
TOXEMIA	1	1	2	0	4
TRACHEITIS	3	5	0	4	12
TRAUMA	17	15	10	11	53
TYMPANITES	6	0	0	0	6
TYPHLITIS	4	0	0	0	4
ULCER ABOMASAL	21	13	10	10	54
ULCER GASTRIC	3	0	0	0	3

CATTLE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
UNSATISFACTORY	0	0	1	6	7
UNSUITABLE ANIMALS	0	0	1	0	1
UREMIA	2	0	0	0	2
URINARY CALCULI	1	0	0	0	1
VASCULAR THROMBOSIS	1	0	0	1	2
VEGETATIVE ENDOCARDITIS	0	1	3	0	4
WINTER DYSENTERY	0	0	0	1	1
TOTAL	3336	2321	740	1524	7921

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABSCESS	1	10	3	8	22
BRAIN	2	0	0	4	6
CERVICAL	1	0	0	0	1
LIVER	1	0	0	0	1
ANEMIA					
HEMORRHAGE	4	2	0	0	6
IRON	2	0	6	0	8
OTHER	2	0	1	0	3
ANOMALY	0	1	0	0	1
ALIMENTARY	0	0	1	0	1
CARDIOVASCULAR	0	0	1	0	1
MUSCULOSKEKLETAL	3	1	0	0	4
NERVOUS	0	0	1	1	2
UROGENITAL	2	0	0	0	2
ANOXIA	0	0	2	0	2
ARTERIOSCLEROSIS	0	0	0	1	1
ARTHRITIS					
BACTERIAL	2	1	0	2	5
CHRONIC	0	1	0	0	1
CORYNE	0	0	0	5	5
POLY	4	2	0	0	6
STAPH	1	0	0	1	2
STREP	4	2	0	3	9
SUPPURATIVE	3	3	8	3	17
UNKNOWN	2	1	0	0	3
ASPHYXIATION	0	0	1	0	1
ATROPHIC RHINITIS	10	1	2	5	18
BACTERIA					
ACTINOBACILLUS SP	3	1	2	2	8
BACTEROIDES	1	0	0	0	1
BORDETELLA SP	1	0	0	0	1
C PYOGENES	14	6	0	8	28
CAMPYLOBACTER SP	3	0	0	9	12
CLOST SP	0	0	0	1	1
CORYNE SP	2	0	0	2	4
E COLI	59	22	0	15	96

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
BACTERIA (Con't.)					
E COLI HEMO	17	0	0	0	17
HEMOPH PARAHAEMOLYTIC	12	0	0	15	27
HEMOPH PLEUROPNEUMONIAE	1	0	0	0	1
HEMOPH SP	2	3	2	0	7
KLEBSIELLA	1	0	0	0	1
PAST MULTOCIDA	18	10	2	5	35
PAST SP	1	0	0	0	1
PROTEUS SP	0	0	0	1	1
PSEUDOMONAS SP	2	0	0	1	3
STAPH AUREUS	4	0	0	1	5
STAPH SP	1	5	1	4	11
STREP A HEMO	8	1	0	1	10
STREP B HEMO	2	0	0	0	2
STREP EQUI	2	1	0	0	3
STREP SP	1	7	6	15	29
STREP ZOOEPIDEMICUS	1	0	1	0	2
TREPONEMA	2	0	0	0	2
CARDIAC FAILURE	4	2	3	3	12
CARDIOMYOPATHY	3	3	0	0	6
CELLULITIS	1	2	0	1	4
CHILLING	0	0	1	1	2
CHONDRODYSTROPHY	1	0	0	0	1
CLOSTRIDIUM SORDELLI INF	1	0	0	0	1
COCCIDIOS INTESTINAL	1	0	0	4	5
COLITIS	5	3	0	0	8
CYST	1	0	0	0	1
OVARIES	0	1	0	0	1
DEFICIENCY					
CALCIUM	0	1	0	2	3
MAGNESIUM	0	1	0	0	1
MALNUTRITION	7	3	0	2	12
SELENIUM	0	1	0	0	1
STARVATION	0	0	3	0	3
VIT E	0	1	0	0	1

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
DEHYDRATION	1	4	0	0	5
DERMATITIS	3	3	1	1	8
BACT	1	1	0	0	2
DISSEMINATED INTRAVASCULAR COA	2	1	0	0	3
DYSENTERY	0	2	0	0	2
DYSTOCIA	4	2	1	0	7
EDEMA DISEASE	0	1	0	0	1
EMACIATION	3	1	2	5	11
ENCEPHALITIS					
NONSUPPURATIVE	1	2	0	1	4
OTHER	1	1	0	0	2
SUPPURATIVE	0	1	0	0	1
ENCEPHALOMALACIA	1	0	0	0	1
ENDOCARDITIS	11	5	0	2	18
ENTERIC COLIBACILLOSIS	74	31	21	63	189
ENTERITIS					
CHRONIC	6	5	0	2	13
HEMORRHAGE	3	8	2	10	23
NECROTIC	24	14	0	6	44
UNKNOWN	35	7	0	7	49
VIRAL	2	9	0	0	11
ENTEROTOX C	0	1	0	0	1
ERYSIPELAS	6	4	3	1	14
EXPERIMENTAL	2	0	0	0	2
FATTY METAMORPHOSIS	1	0	0	0	1
FOR CULTURE	6	5	8	0	19
FOR HEMATOLOGY	1	0	0	0	1

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
FOR IDENTIFICATION	19	0	0	0	19
FRACTURE	3	3	0	0	6
GASTRITIS	2	0	0	1	3
GLASSERS DISEASE	0	1	0	0	1
GREASY PIG DISEASE	15	10	2	4	31
GROWTH INFLAMMATION	1	0	0	0	1
HEMATOMA	1	0	0	0	1
HEMORRHAGE ENTERITIS SYNDROME	3	1	0	0	4
HEPATIC					
CIRRHOSIS	3	0	0	0	3
FIBROSIS	0	0	0	1	1
LIPIDOSIS	0	0	0	1	1
NECROSIS	4	0	0	1	5
HEPATITIS	3	0	0	0	3
HEPATOSIS DIETETICA	0	0	0	1	1
HERNIA	4	0	0	0	4
ABDOMINAL	1	0	0	0	1
DIAPHRAGMATIC	0	0	0	1	1
SCROTAL	0	1	1	0	2
HYDROCEPHALUS	1	0	0	0	1
HYDRONEPHROSIS	0	0	1	0	1
HYPERKERATOSIS	2	0	0	0	2
HYPOGLYCEMIA	2	0	0	0	2
ILEITIS TERMINAL	1	2	0	3	6
IMPACT BOWEL	1	0	0	0	1
IMPACTION	0	0	1	0	1
INCLUSION BODY RHINITIS	2	2	0	0	4

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
INFARCT	0	1	0	1	2
INTESTINAL PERFORATION	0	0	1	0	1
LAB EXAMS NEG	3	48	6	46	103
LYMPHADENITIS	1	0	0	0	1
MALABSORPTION SYNDROME	0	2	0	3	5
MASTITIS	1	4	0	1	6
COLIFORM	1	0	0	1	2
STAPHYLOCOCCUS	0	0	0	1	1
MENINGITIS	10	3	2	14	29
BACTERIAL	5	3	1	10	19
MENINGOEN					
NONSUPPURATIVE	0	1	0	0	1
SUPPURATIVE	5	1	0	1	7
METRITIS	0	2	0	1	3
MISMANAGEMENT	0	0	0	5	5
MISCELLANEOUS LAB FINDINGS					
BONES & JOINTS	0	0	0	2	2
CIRCULATORY	1	1	0	1	3
DIGESTIVE	3	7	0	8	18
HEMATOPOIETIC	1	0	0	0	1
LIVER	1	0	0	0	1
MUSCLE	0	1	0	1	2
NERVOUS	2	0	0	1	3
OTHER	0	1	0	9	10
REPRODUCTIVE	0	0	0	1	1
RESPIRATORY	0	1	0	6	7
URINARY	0	0	0	1	1
MULBERRY HEART DISEASE	16	3	1	8	28
MYCOPLASMA SP	2	2	0	0	4
MYELITIS	1	0	0	0	1
MYOCARDITIS	1	3	0	0	4

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
MYOPATHY NUTRITIONAL	1	1	0	0	2
MYOSITIS	0	2	0	0	2
NEOPLASMS (See table)					
NEGATIVE SALMONELLA	0	2	0	6	8
NEO NATAL DIARRHEA	13	8	0	3	24
NEPHRITIS					
EMBOLIC	1	0	0	0	1
GLOMERULO	2	0	0	0	2
INTERSTITIAL	3	0	0	1	4
PYELO	1	1	1	2	5
NEPHROSIS	1	1	0	1	3
NO DIAGNOSIS	62	20	4	24	110
NO TEST	3	0	0	0	3
NO VISIBLE LESION	22	0	0	12	34
NORMAL TISSUE	3	1	2	2	8
OBSTRUCT INTESTINAL	0	0	1	0	1
OMPHALITIS	1	0	0	0	1
OMPHALOPHLEBITIS	0	1	0	0	1
ORCHITIS	2	0	0	0	2
OSTEODYSTROPHY	2	0	0	0	2
OSTEOMYELITIS	1	1	1	1	4
OSTEOPOROSIS	2	0	0	0	2
OTITIS MEDIA	0	0	1	0	1
OVERHEATING	0	1	0	0	1
PARASITISM (See table)					

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
PERICARDITIS	7	4	2	5	18
PERITONITIS	11	6	7	4	28
PITYRIASIS ROSEA	1	0	1	0	2
PLEURITIS	4	2	1	6	13
PLEUROPNEUMONIA	2	0	1	0	3
PNEUMONIA					
BACTERIAL	13	1	1	19	34
BRONCHO	60	15	4	60	139
CHRONIC NONRESOLVING	9	5	2	7	23
ENZOOTIC	56	14	3	11	84
FIBRINOUS	5	1	1	26	33
GANGRENOUS	0	0	0	1	1
HEMOPHILUS	15	7	4	13	39
INHALATION	1	0	0	1	2
INTERSTITIAL	7	0	0	1	8
OTHER	2	5	0	1	8
PARASITIC	1	0	0	1	2
PASTEURELLA	32	10	5	10	57
SUPPURATIVE	8	15	5	2	30
VIRAL	0	1	0	0	1
POLIOENCEPHALOMALACIA	0	0	0	2	2
POLYSEROSITIS	5	2	1	2	10
PORCINE STRESS SYNDROME	9	1	0	1	11
PROLAPSE RECTUM	1	0	2	2	5
PULMONARY EDEMA	7	2	0	5	14
RHINITIS	1	4	0	0	5
RICKETS	1	0	0	0	1
RUPTURE					
SPLEEN	0	1	0	0	1
URINARY BLADDER	1	0	0	0	1
SALMONELLA SP	0	4	0	1	5

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
SEPTICEMIA					
E COLI	20	2	1	0	23
PASTEURELLA	3	1	0	0	4
STAPH	19	0	0	0	19
STREP	18	0	5	5	28
UNKNOWN	20	1	1	3	25
SEROSITIS	1	0	0	4	5
SHHP	0	0	0	21	21
SPECIMEN UNSUITABLE	2	2	1	5	10
SPLENIC HYPERPLASIA	1	0	0	0	1
STARVE OUT	2	0	0	1	3
STILLBORN	0	4	5	5	14
STRESS	1	0	0	1	2
SUITABLE FOR HUMAN USE	1	0	0	2	3
SWINE DYSENTERY	12	16	2	12	42
TORSION					
INTESTINAL	7	6	3	2	18
MESENTERIC	5	5	0	15	25
OTHER	5	2	0	1	8
STOMACH	1	0	0	1	2
TOXICOSES (See table)					
TOXEMIA	0	1	2	0	3
TRANSMISSIBLE GASTROENTERITIS	4	2	1	1	8
TRAUMA	9	3	11	4	27
TYMPANITES	1	0	0	0	1
ULCER					
GASTRIC	9	7	0	12	28
UNSATISFACTORY	0	0	0	2	2

SWINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
UNSUITABLE ANIMALS	0	0	3	0	3
UNSUITABLE FOR HUMAN USE	0	0	0	2	2
VEGETATIVE ENDOCARDITIS	0	1	5	1	7
TOTAL	1056	503	191	692	2,442

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABOMASITIS	1	1	2	2	6
ABSCESS	3	3	4	2	12
BRAIN	1	0	1	2	4
LIVER	0	0	0	1	1
ANEMIA OTHER	0	1	0	3	4
ANOMALY					
CARDIOVASCULAR	0	0	1	0	1
MULTIPLE	1	0	0	0	1
MUSCULOSKEKLETAL	1	1	0	0	2
ANOXIA	0	0	2	1	3
ARTHRITIS					
CHRONIC	0	0	0	1	1
STREP	0	0	0	1	1
UNKNOWN	0	1	0	0	1
ATRESIA ANI	0	0	0	1	1
BACTERIA					
BACTEROIDES	6	2	0	0	8
C PSEUDOTUBERCULOSIS	0	2	0	1	3
C PYOGENES	0	2	0	2	4
CAMPYLOBACTER SP	1	0	0	0	1
CLOST SP	0	0	0	1	1
CORYNE SP	3	2	1	1	7
E COLI	2	1	1	2	6
FUSOBACTERIUM NECROPHORUM	1	0	0	0	1
HEMOPH SP	0	7	0	0	7
PAST HEMOLYTICA	1	1	0	0	2
STAPH AUREUS	1	0	0	0	1
STREP SP	1	0	0	0	1
BLOAT	0	2	12	1	15
BRAXY	0	0	2	0	2
CARDIAC FAILURE	0	1	0	3	4
CASEOUS LYMPHADENITIS	2	0	4	0	6

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
CHILLING	0	1	1	0	2
COCCIDIOS INTESTINAL	3	0	1	6	10
CYST	0	0	0	1	1
DEFICIENCY					
CAL PHOS IMBALANCE	0	1	0	0	1
COPPER	0	0	1	0	1
IODINE	1	0	1	0	2
MALNUTRITION	6	8	0	2	16
STARVATION	0	0	16	1	17
DEHYDRATION	0	1	0	0	1
DISSEMINATED INTRAVASCULAR COA	0	0	1	0	1
DYSTOCIA	0	2	1	0	3
EMACIATION	3	2	0	2	7
ENCEPHALITIS					
H SOMNUS	0	1	0	0	1
NONSUPPURATIVE	1	1	0	0	2
OTHER	0	1	0	0	1
SUPPURATIVE	0	1	0	0	1
ENCEPHALOMALACIA	0	0	1	0	1
ENDOCARDITIS	1	0	0	1	2
ENTERIC COLIBACILLOSIS	0	0	0	2	2
ENTERITIS					
CHRONIC	0	0	0	2	2
CLOSTRIDIUM SP	0	1	1	0	2
HEMORRHAGE	0	0	1	0	1
PARASITE	1	1	0	0	2
ULCERATIVE	1	0	0	0	1
UNKNOWN	1	3	2	0	6
ENTEROTOX C	0	1	0	0	1
ENTEROTOX D	3	2	1	1	7
EPIDIDYMITIS	1	1	0	1	3

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
EXPERIMENTAL	9	0	4	0	13
FOOT ROT	7	2	0	0	9
FOR CULTURE	1	7	3	0	11
FOR SEROLOGY	2	0	0	0	2
GOITRE	2	4	0	1	7
HEPATIC NECROSIS	1	0	0	0	1
HEPATITIS					
BACTERIAL	0	0	0	1	1
NECROTIC	0	1	0	0	1
UNKNOWN	0	0	1	0	1
HERNIA ABDOMINAL	0	0	0	1	1
HYPOGLYCEMIA	1	0	0	0	1
INFARCT	0	1	0	0	1
JOHNES DISEASE	0	2	4	2	8
LAB EXAMS NEG	1	23	2	4	30
LISTERIOSIS	1	0	1	0	2
LYMPHADENITIS	1	0	0	0	1
MALIGNANT EDEMA	1	0	0	0	1
MASTITIS	0	1	0	0	1
PASTEURELLA	0	0	0	1	1
MENINGITIS	0	2	0	0	2
BACTERIAL	2	1	0	0	3
UNKNOWN	1	0	0	0	1
MENINGOEN SUPPURATIVE	2	0	0	0	2
METRITIS	1	3	0	1	5

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
MISCELLANEOUS LAB FINDINGS					
DIGESTIVE	0	2	0	1	3
OTHER	0	2	0	1	3
MYOCARDITIS	1	1	0	0	2
MYOPATHY NUTRITIONAL	2	1	2	0	5
NEOPLASMS (See table)					
NEGATIVE SALMONELLA	0	1	0	0	1
NEO NATAL DIARRHEA	0	3	0	0	3
NEPHRITIS					
GLOMERULO	0	0	5	0	5
NTERSTITIAL	1	0	0	0	1
PYELO	0	0	1	0	1
NEPHROSIS	1	0	0	0	1
NO DIAGNOSIS	8	9	2	5	24
NO TEST	2	0	1	0	3
NO VISIBLE LESION	3	0	0	2	5
NORMAL TISSUE	2	1	0	1	4
OSTEODYSTROPHY	1	0	0	0	1
PARASITISM (See table)					
PERICARDITIS	1	1	0	0	2
PERITONITIS	1	1	2	3	7
PLEURITIS	3	1	0	1	5
SUPPURATIVE	0	0	0	1	1
PLEUROPNEUMONIA	1	0	0	0	1
PNEUMONIA					
BACTERIAL	4	0	2	3	9
BRONCHO	9	3	1	6	19

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
PNEUMONIA (Con't.)					
CHRONIC NONRESOLVING	1	2	0	0	3
FIBRINOUS	0	1	0	0	1
GANGRENOUS	0	0	0	1	1
GRANULOMATOUS	1	0	0	0	1
INHALATION	1	2	0	0	3
INTERSTITIAL	0	0	0	2	2
OTHER	0	2	0	0	2
PARASITIC	5	0	0	0	5
PASTEURELLA	6	1	1	3	11
SUPPURATIVE	1	4	0	1	6
POLIOENCEPHALOMALACIA	6	4	1	3	14
PREGNANCY TOX	0	0	1	0	1
PROLAPSE VAGINA	0	0	2	0	2
PULMONARY EDEMA	2	7	0	3	12
RICKETS	1	0	0	0	1
RUMEN OVERLOAD	2	3	0	2	7
RUMENITIS	2	0	0	1	3
RUMENITIS MYCOTIC	0	1	0	0	1
RUPTURE BLADDER	0	0	2	1	3
RUPTURE UTERUS	0	0	0	1	1
SCRAPIE	0	0	0	1	1
SEPTICEMIA					
E COLI	1	0	0	1	2
PASTEURELLA	2	0	2	1	5
STAPH	1	0	1	0	2
UNKNOWN	2	0	1	0	3
STILLBORN	0	7	8	1	16
STRESS	1	0	0	0	1
TETANUS	0	0	0	1	1

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
MISCELLANEOUS LAB FINDINGS					
DIGESTIVE	0	2	0	1	3
OTHER	0	2	0	1	3
MYOCARDITIS	1	1	0	0	2
MYOPATHY NUTRITIONAL	2	1	2	0	5
NEOPLASMS (See table)					
NEGATIVE SALMONELLA	0	1	0	0	1
NEO NATAL DIARRHEA	0	3	0	0	3
NEPHRITIS					
GLOMERULO	0	0	5	0	5
NTERSTITIAL	1	0	0	0	1
PYELO	0	0	1	0	1
NEPHROSIS	1	0	0	0	1
NO DIAGNOSIS	8	9	2	5	24
NO TEST	2	0	1	0	3
NO VISIBLE LESION	3	0	0	2	5
NORMAL TISSUE	2	1	0	1	4
OSTEODYSTROPHY	1	0	0	0	1
PARASITISM (See table)					
PERICARDITIS	1	1	0	0	2
PERITONITIS	1	1	2	3	7
PLEURITIS	3	1	0	1	5
SUPPURATIVE	0	0	0	1	1
PLEUROPNEUMONIA	1	0	0	0	1
PNEUMONIA					
BACTERIAL	4	0	2	3	9
BRONCHO	9	3	1	6	19

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
PNEUMONIA (Con't.)					
CHRONIC NONRESOLVING	1	2	0	0	3
FIBRINOUS	0	1	0	0	1
GANGRENOUS	0	0	0	1	1
GRANULOMATOUS	1	0	0	0	1
INHALATION	1	2	0	0	3
INTERSTITIAL	0	0	0	2	2
OTHER	0	2	0	0	2
PARASITIC	5	0	0	0	5
PASTEURELLA	6	1	1	3	11
SUPPURATIVE	1	4	0	1	6
POLIOENCEPHALOMALACIA	6	4	1	3	14
PREGNANCY TOX	0	0	1	0	1
PROLAPSE VAGINA	0	0	2	0	2
PULMONARY EDEMA	2	7	0	3	12
RICKETS	1	0	0	0	1
RUMEN OVERLOAD	2	3	0	2	7
RUMENITIS	2	0	0	1	3
RUMENITIS MYCOTIC	0	1	0	0	1
RUPTURE BLADDER	0	0	2	1	3
RUPTURE UTERUS	0	0	0	1	1
SCRAPIE	0	0	0	1	1
SEPTICEMIA					
E COLI	1	0	0	1	2
PASTEURELLA	2	0	2	1	5
STAPH	1	0	1	0	2
UNKNOWN	2	0	1	0	3
STILLBORN	0	7	8	1	16
STRESS	1	0	0	0	1
TETANUS	0	0	0	1	1

OVINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
TORSION					
INTESTINAL	2	1	0	0	3
MESENTERIC	0	3	0	4	7
TOXICOSIS (See table)					
TRAUMA	3	4	6	1	14
ULCER ABOMASAL	0	1	2	0	3
URETHRAL OBSTRUCTION	0	0	1	1	2
URINARY CALCULI	0	0	0	1	1
VASCULAR THROMBOSIS	1	1	0	0	2
VEGETATIVE ENDOCARDITIS	0	0	1	0	1
VIBRIOSIS	1	0	0	0	1
TOTAL	162	172	118	109	561

CAPRINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABOMASITIS	1	0	0	0	1
ABORTION					
BACTERIAL	1	0	0	0	1
MUMMIFIED	2	0	0	0	2
OTHER	1	0	0	0	1
ABSCESS	1	2	0	0	3
ANEMIA HEMORRHAGE	0	1	0	0	1
ANOMALY					
CARDIOVASCULAR	1	0	0	0	1
MULTIPLE	1	0	0	0	1
ARTHRITIS CHRONIC	0	1	0	0	1
BACTERIA					
C PSEUDOTUBERCULOSIS	6	3	0	1	10
C PYOGENES	0	0	1	0	1
CORYNE SP	1	1	0	0	2
E COLI	2	0	0	0	2
PAST HEMOLYTICA	1	0	0	0	1
STAPH SP	0	1	0	0	1
STREP SP	0	0	0	2	2
STREP UBERIS	2	0	0	0	2
CARDIAC FAILURE	1	0	0	0	1
CARDIOMYOPATHY	2	0	1	0	3
CASEOUS LYMPHADENITIS	5	0	0	0	5
COCCIDIOS INTESTINAL	0	1	1	0	2
DEFICIENCY					
CALCIUM	0	1	0	0	1
IODINE	1	0	0	0	1
MALNUTRITION	1	0	0	1	2
PHOSPHORUS	0	1	0	0	1
SELENIUM	0	1	0	0	1
VITAMIN E	0	1	0	0	1
DERMATITIS	3	0	0	0	3

CAPRINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
DERMATOMYCOSIS	0	1	1	0	2
EMACIATION	3	1	0	0	4
ENCEPHALITIS SUPPURATIVE	1	1	0	0	2
ENTERITIS					
CLOSTRIDIUM SP	0	0	1	0	1
UNKNOWN	0	0	1	0	1
FOR CULTURE	1	1	3	0	5
FOR CYTOLOGY	1	0	0	0	1
GRANULOMA	1	0	0	0	1
GROWTH INFLAMMATION	1	0	0	0	1
HEPATITIS UNKNOWN	1	0	0	0	1
JOHNES DISEASE	2	0	0	0	2
LAB EXAMS NEGATIVE	14	3	2	5	24
LISTERIOSIS	1	1	0	0	2
LYMPHADENITIS	2	0	0	0	2
MASTITIS	4	0	0	0	4
STAPHYLOCOCCUS	0	2	0	0	2
MISCELLANEOUS LAB FINDINGS					
CIRCULATORY	0	0	0	1	1
DIGESTIVE	1	0	0	0	1
MYOCARDITIS	0	1	0	0	1
MYOPATHY	1	1	0	0	2
NUTRITIONAL	1	0	0	0	1
MYOSITIS	1	0	0	0	1
NEGATIVE SALMONELLA	0	0	0	1	1
NEOPLASMS (see table)					

CAPRINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
NEPHRITIS GLOMERULO	1	0	0	0	1
NEPHRITIS OTHER	1	0	0	0	1
NO DIAGNOSIS	11	3	1	0	15
NO VISIBLE LESION	3	0	0	1	4
NORMAL TISSUE	1	0	0	0	1
OSTEODYSTROPHY	1	0	0	0	1
PERITONITIS	0	1	0	0	1
PARASITISM (see table)					
PNEUMONIA					
BACTERIAL	1	0	0	0	1
BRONCHO	1	0	0	0	1
CHRONIC NONRESOLVING	0	3	0	0	3
INHALATION	2	0	0	0	2
INTERSTITIAL	1	1	0	0	2
OTHER	0	0	0	2	2
PARASITIC	1	0	0	0	1
PASTEURELLA	1	0	0	0	1
SUPPURATIVE	1	0	0	0	1
POLIOENCEPHALOMALACIA	1	0	0	0	1
PULMONARY EDEMA	3	1	0	0	4
RUMEN OVERLOAD	0	2	0	1	3
RUMENITIS	2	0	0	1	3
RUPTURE BLADDER	0	0	1	0	1
SEPTICEMIA UNKNOWN	1	0	0	0	1
SPECIMEN UNSUITABLE	1	2	0	0	3
TORSION MESENTERIC	0	0	0	1	1
TOXOPLASMOSIS	0	1	0	0	1

CAPRINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ULCER GASTRIC	1	0	0	0	1
UNSUITABLE ANIMALS	0	0	1	0	1
URINARY CALCULI	0	0	1	0	1
VAGINITIS	1	0	0	0	1
TOTAL	105	40	15	17	177

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
AIR SACCULITIS	5	3	0	1	9
ANEMIA	1	0	0	0	1
APLASTIC	2	0	0	0	2
HEMORRHAGE	8	1	0	0	9
OTHER	1	0	0	0	1
ANOMALY ALIMENTARY	0	0	1	0	1
AORTIC RUPTURE	1	0	0	0	1
ARTHRITIS					
BACTERIAL	3	1	0	0	4
POLY	0	1	0	0	1
STAPHYLOCOCCUS	32	1	0	6	39
SUPPURATIVE	1	1	0	0	2
ASCITES	92	22	4	8	126
ASPERGILLOSIS	4	0	1	0	5
ASPHYXIATION	17	0	1	0	18
BACTERIA					
E COLI	0	5	1	1	7
HEMOPHILUS SP	0	0	0	1	1
PAST HEMOLYTICA	0	1	0	0	1
PAST MULTOCIDA	0	5	1	0	6
STAPH AUREUS	2	11	2	0	15
STAPH SP	0	0	0	4	4
BREAST BLISTER	0	0	0	1	1
BRONCHITIS	1	0	0	0	1
BUMBLEFOOT	4	0	0	0	4
BURSAL DISEASE	2	2	1	0	5
CAGED LAYER PARALYSIS	6	1	0	13	20
CANNIBALISM	21	3	8	3	35

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
CARDIAC FAILURE	7	0	1	8	16
CARDIOMYOPATHY	0	3	0	0	3
CELLULITIS	0	0	0	1	1
CHONDRODYSTROPHY	3	0	0	4	7
COCCIDIOSIS					
CECAL	3	1	1	0	5
INTESTINAL	22	2	0	3	27
CONJUNCTIVITIS	2	0	0	0	2
CORNEAL OPACITY	1	0	0	0	1
DEFICIENCY					
CAL PHOS IMBALANCE	1	5	1	0	7
CALCIUM	0	0	0	2	2
MALNUTRITION	6	4	4	1	15
NONSPECIFIC	0	0	0	2	2
OTHER	0	0	0	1	1
RIBOFLAVIN	1	0	0	0	1
STARVATION	0	0	4	0	4
VITAMIN A	6	0	2	3	11
VITAMIN B COMPLEX	1	0	0	0	1
VITAMIN D	0	1	0	0	1
DEHYDRATION	41	6	0	3	50
DERMATITIS	1	1	0	4	6
BACT	1	0	0	0	1
GANGRENOUS	8	0	0	0	8
NUTRITIONAL	0	0	0	1	1
EGG PRODUCTION LOSS	10	0	0	0	10
EGGBOUND	2	0	0	0	2
EMACIATION	9	4	2	0	15
ENCEPHALITIS					
AVIAN	7	2	0	0	9
OTHER	3	0	0	0	3
SUPPURATIVE	1	0	0	0	1

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ENCEPHALOMALACIA	2	0	1	0	3
ENDOCARDITIS	3	0	0	0	3
ENTERITIS					
CATARRHAL	2	0	0	0	2
CHRONIC	1	0	0	0	1
HEMORRHAGE	0	1	0	0	1
NECROTIC	63	2	2	4	71
PARASITE	1	0	0	0	1
TRANSMISSIBLE	0	0	0	1	1
ERYSIPELAS	0	0	2	0	2
EXPERIMENTAL	1	0	0	1	2
FATTY LIVER SYNDROME	7	0	0	5	12
FEATHERING POOR	0	1	0	0	1
FEED ANALYSIS	12	0	0	0	12
FLIP OVER	189	16	3	0	208
FOR CULTURE	129	2	0	0	131
FOWL CHOLERA	16	3	1	2	22
FRACTURE	1	0	0	0	1
GIZZARD IMPACTION	2	0	0	0	2
GOUT	22	4	1	0	27
VISCERAL	22	0	1	1	24
GRANULATION TISSUE	1	0	0	0	1
GRANULOMA	1	0	0	0	1
GROWTH INFLAMMATION	0	0	0	1	1
HATCHING PROBLEM	2	0	0	0	2
HEAT PROSTRATION	1	1	0	0	2
HEMORRHAGE LIVER SYNDROME	18	1	0	1	20

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
HEPATIC					
FIBROSIS	1	0	0	0	1
LIPIDOSIS	1	0	1	0	2
NECROSIS	0	4	0	0	4
HEPATITIS	5	1	1	0	7
BACTERIAL	5	0	2	0	7
NECROTIC	0	1	0	0	1
TOXIN	1	0	0	0	1
UNKNOWN	13	0	0	0	13
HEPATOSIS DIETETICA	1	0	0	0	1
HYDROCEPHALUS	1	0	0	0	1
IMPACT					
BOWEL	6	0	0	0	6
OVIDUCT	12	0	1	0	13
IMPACTION	1	1	0	0	2
INFECTIOUS					
BRONCHITIS	2	0	0	5	7
CORYZA	2	0	0	1	3
LARYNGOTRACHEITIS	6	4	1	0	11
YOLK SAC	5	5	0	7	17
INTUSSUSCEPTION	1	0	0	0	1
KERATITIS	6	0	0	0	6
KINKY BACK	8	2	0	0	10
LAB EXAMS NEGATIVE	23	25	2	15	65
LARYNGOTRACHEITIS	1	0	0	1	2
LEG WEAKNESS	65	10	5	1	81
LEUKOSIS					
LYMPHOID	95	9	1	5	110
MYELOGENOUS	5	0	0	2	7
UNDIFFERENTIATED	0	3	0	2	5

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
LISTERIOSIS	0	0	1	0	1
LITTER EATING	1	0	0	0	1
MYCO GALLISEPTICUM	1	0	0	0	1
MALABSORPTION SYNDROME	0	1	0	0	1
MAREKS					
DISEASE GENERAL	9	6	0	11	26
DISEASE NEURAL	8	2	0	5	15
MISCELLANEOUS LAB FINDINGS					
BONES & JOINTS	2	1	0	1	4
DIGESTIVE	6	1	0	0	7
HEMATOPOIETIC	1	1	0	0	2
MUSCLE	0	1	0	0	1
NERVOUS	1	0	0	0	1
OTHER	8	2	0	4	14
REPRODUCTIVE	12	2	0	2	16
RESPIRATORY	1	0	0	0	1
MYOCARDITIS	1	3	0	0	4
MYOPATHY PECTORAL	3	1	0	0	4
NEOPLASM					
ADENOC	0	2	0	0	2
ADENOC INTESTINE	0	1	0	0	1
ADENOC OVARY	7	0	0	0	7
ADENOC UNDIFFERENTIATED	2	0	0	0	2
ADENOMA	0	0	0	1	1
CARC SQUAMOUS	1	0	0	1	2
CARCINOMA	1	0	0	1	2
FIBROSARCOMA	0	0	0	1	1
HEMANGIOMA	1	0	0	0	1
LYMPHOSARCOMA	1	1	0	1	3
OTHER	0	0	0	1	1
SARCOMA	1	0	0	1	2
NEGATIVE SALMONELLA	0	115	0	48	163
NEGATIVE SALMONELLA PARA	168	0	0	0	168
NEPHRITIS OTHER	3	0	0	0	3

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
NEPHROSIS	10	0	0	0	10
NO DIAGNOSIS	35	6	4	15	60
NO TEST	17	0	1	0	18
NO VISIBLE LESION	25	1	0	5	31
NORMAL TISSUE	0	0	1	1	2
OBESTITY	0	1	0	0	1
OMPHALITIS	81	2	5	13	101
OMPHALOPHLEBITIS	0	6	0	0	6
OOPHORITIS	0	6	0	0	6
OSTEOMALACIA	1	0	0	0	1
OSTEOMYELITIS	6	0	0	1	7
OSTEOPOROSIS	84	0	0	0	84
OTITIS MEDIA	0	1	0	0	1
OVERHEATING	1	1	0	0	2
PARASITISM (see table)					
PASTED VENT	4	1	2	0	7
PENDULOUS CROP	1	0	0	1	2
PERICARDITIS	0	4	1	0	5
PERITONITIS	22	13	5	1	41
PEROSIS	0	0	0	1	1
PNEUMONIA BACTERIAL	1	0	0	0	1
POSITIVE SALMONELLA	21	11	0	8	40
PROLAPSE CLOACA	12	1	0	0	13

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
PULMONARY EDEMA	9	1	0	0	10
REPRODUCTIVE DISORDER	11	0	0	0	11
RICKETS	0	2	0	0	2
ROUND HEART DIS	16	0	0	0	16
RUPTURE					
AORTIC	1	0	0	1	2
LIVER	2	0	0	0	2
TENDON	6	0	0	0	6
YOLK	9	0	0	0	9
SALMONELLA SP	19	0	0	0	19
SALMONELLOSIS	1	0	1	1	3
SEPTICEMIA					
E COLI	22	1	0	0	23
STAPHYLOCOCCUS	4	1	3	0	8
STREPTOCOCCAL	3	0	1	0	4
UNKNOWN	4	0	1	0	5
SINUSITIS	1	0	0	0	1
SPECIMEN UNSUITABLE	11	0	0	3	14
SPONDYLITIS	0	0	0	1	1
STARVE OUT	9	1	2	4	16
SUITABLE FOR HUMAN USE	51	0	1	0	52
SYNOVITIS	1	1	0	0	2
TENDON RUPTURE	0	1	0	0	1
TIBIAL ROTATION	12	1	0	3	16
TOXICOSIS (see table)					
TORSION INTESTINAL	3	0	0	0	3
TRACHEITIS	5	2	0	0	7

CHICKEN DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
TRAUMA	21	4	6	8	39
TUBERCULOSIS	13	7	4	3	27
ULCER					
GIZZARD	5	0	0	0	5
SKIN	1	0	0	0	1
UNSUITABLE ANIMALS	2	0	0	0	2
URINARY CALCULI	1	0	0	0	1
VACCINATION REACTION	1	0	0	0	1
VEGETATIVE ENDOCARDITIS	1	0	0	0	1
TOTAL	1906	399	99	274	2678

TURKEY DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
AIR SACCULITIS	9	4	0	5	18
ANEURYSM	0	1	0	0	1
AORTIC RUPTURE	1	1	0	1	3
ARIZONA INFECTION	4	0	5	1	10
ARTHRITIS					
STAPH	2	1	0	2	5
STREP	0	0	0	1	1
UNKNOWN	1	0	0	0	1
ASCITES	17	0	0	1	18
ASPERGILLOSIS	25	0	0	0	25
ASPHYXIATION	1	0	0	0	1
BACTERIA					
ARIZONA SP	1	2	2	1	6
E COLI	1	3	0	0	4
MYCOPLASMA	1	0	0	0	1
PAST MULTOCIDA	0	1	0	0	1
STAPH AUREUS	1	1	0	0	2
BREAST BLISTER	1	0	0	0	1
BRONCHITIS	1	0	0	0	1
CANDIDIASIS	2	0	0	0	2
CANNIBALISM	4	0	0	1	5
CARDIAC TAMPONADE	0	0	0	1	1
CARDIOMYOPATHY	1	1	0	0	2
CELLULITIS	0	0	0	1	1
COCCIDIOS					
CECAL	1	0	0	0	1
INTESTINAL	12	0	0	0	12

TURKEY DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
DEFICIENCY					
MALNUTRITION	1	0	0	0	1
STARVATION	0	0	2	0	2
VIT A	0	0	0	1	1
DEHYDRATION	26	2	0	0	28
DERMATITIS	1	0	0	0	1
EMACIATION	2	4	1	0	7
ENTERITIS					
CATARRHAL	15	1	0	0	16
CHRONIC	1	0	0	0	1
GRANULOMATOUS	1	0	0	0	1
HEMORRHAGE	3	2	0	0	5
NECROTIC	9	0	0	0	9
PROTOZOA	1	0	0	0	1
TRANSMISSIBLE	1	0	0	0	1
UNKNOWN	0	1	0	0	1
VIRAL	0	2	0	0	2
ERYSIPELAS	6	1	1	0	8
EXPERIMENTAL	1	0	0	0	1
FEED ANALYSIS	6	0	0	0	6
FOOT ROT	3	0	0	0	3
FOR CULTURE	31	0	1	0	32
FOR IDENTIFICATION	1	0	0	0	1
FOWL CHOLERA	4	0	0	1	5
FRACTURE	4	0	0	0	4
GIZZARD					
IMPACTION	3	0	0	0	3
PERFORATION	0	0	1	0	1
GOUT VISCERAL	1	0	0	0	1
GRANULATION TISSUE	1	0	0	0	1

TURKEY DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
GRANULOMA	2	0	0	0	2
HEPATITIS	1	1	1	0	3
UNKNOWN	1	0	0	0	1
HISTOMONIASIS	9	2	4	5	20
IMPACT					
BOWEL	2	0	0	0	2
OVIDUCT	1	0	0	0	1
IMPACTION	1	0	0	2	3
INFECTIOUS					
SINUSITIS	1	0	0	0	1
YOLK SAC	1	1	0	0	2
KINKY BACK	1	0	0	0	1
LAB EXAMS NEG	5	3	3	3	14
LEG WEAKNESS	18	0	1	0	19
LITTER EATING	18	0	0	1	19
MISMANAGEMENT	1	0	0	0	1
MISCELLANEOUS LAB FINDINGS					
DIGESTIVE	1	0	0	1	2
OTHER	8	0	0	0	8
RESPIRATORY	1	0	0	0	1
MYCO ASPERGILLUS SP	0	0	0	1	1
MYCO SP	0	1	0	0	1
MYCOPLASMA SP	1	0	0	0	1
N LYMPHOSARCOMA	1	0	0	0	1
NEGATIVE SALMONELLA	0	1	0	1	2
NEGATIVE SALMONELLA PARA	25	0	0	0	25
NEPHROSIS	1	0	0	0	1

TURKEY DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
NO DIAGNOSIS	12	1	1	1	15
NO TEST	4	0	0	0	4
NO VISIBLE LESION	4	0	0	2	6
OMPHALITIS	15	1	1	0	17
OMPHALOPHLEBITIS	0	1	0	0	1
OSTEODYSTROPHY	1	0	0	0	1
OSTEOMYELITIS	2	0	0	0	2
PARASITISM					
CAPILLARIA SP	0	0	2	0	2
COCCIDIA	0	0	0	1	1
PANOPHTHALMITIS	0	0	0	1	1
PENDING	1	0	0	0	1
PERICARDITIS	2	0	0	0	2
PERITONITIS	0	2	1	0	3
PNEUMONIA					
BACTERIAL	7	1	0	0	8
FIBRINOUS	0	2	0	0	2
GRANULOMATOUS	1	0	0	0	1
PULMONARY EDEMA	3	0	0	0	3
RICKETS	5	2	0	0	7
ROUND HEART DIS	13	12	0	1	26
RUPTURE AORTIC	11	2	0	0	13
SALMONELLA SP	3	1	0	1	5
SALMONELLOSIS	7	0	3	0	10
SEPTICEMIA					
E COLI	41	2	0	0	43

TURKEY DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
SEPTICEMIA (Con't.)					
STAPH	0	1	1	0	2
UNKNOWN	1	0	1	0	2
SHOCK	1	0	0	0	1
SINUSITIS	0	2	1	2	5
IDIOPATHIC	1	0	0	0	1
SPECIMEN UNSUITABLE	1	0	0	0	1
SPLENIC HYPERPLASIA	1	0	0	0	1
SPRADDLE LEG	1	0	0	0	1
STARVE OUT	31	0	1	6	38
STRESS	23	0	0	0	23
SUITABLE FOR HUMAN USE	4	0	0	0	4
TIBIAL ROTATION	8	0	0	0	8
TRAUMA	11	1	2	0	14
TUBERCULOSIS	0	0	1	0	1
TYPHLITIS	1	0	0	0	1
ULCER					
GASTRIC	1	0	0	0	1
GIZZARD	1	0	0	0	1
TOTAL	526	68	37	46	677

EQUINE DISEASES
(Includes Mule, Donkey, Equidae, if any)

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABSCESS	2	3	1	0	6
LIVER	0	0	0	1	1
ACTINOBACILLOSIS	1	0	2	1	4
ANEMIA					
HEMORRHAGE	5	1	1	0	7
OTHER	1	1	0	0	2
ANOMALY	1	0	0	0	1
CARDIOVASCULAR	2	0	0	0	2
EYE & EAR	1	0	0	0	1
MULTIPLE	2	0	0	0	2
MUSCULOSKEKLETAL	1	0	0	0	1
ANOXIA	0	0	0	1	1
ARTHRITIS					
CHRONIC	0	2	0	0	2
DEGENERATIVE	1	1	0	0	2
SUPPURATIVE	0	1	0	0	1
BACTERIA					
ACTINOBACILLUS SP	3	4	0	1	8
BACILLUS SP	0	2	0	2	4
BACTEROIDES	1	0	0	0	1
BORD BRONCHISEPTICA	1	0	0	0	1
C PYOGENES	2	1	0	2	5
CL SEPTICUM	1	0	0	0	1
CORYNE SP	0	1	0	2	3
E COLI	4	5	1	14	24
HEMOPH SP	0	0	0	1	1
MICROCOCCUS SP	1	0	0	0	1
PASTEURELLA SP	0	1	0	0	1
PROTEUS SP	1	0	0	0	1
PSEUDOMONAS SP	0	0	5	1	6
SHIGELLA SP	0	1	0	0	1
STAPH AUREUS	7	2	3	2	14
STAPH SP	1	0	2	8	11
STREP B HEMO	1	0	0	0	1
STREP EQUI	5	4	1	8	18
STREP SP	6	0	1	6	13
STREP ZOOEPIDEMICUS	2	6	2	33	43

EQUINE DISEASES
(Includes Mule, Donkey, Equidae, if any)

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
BIOPSY UTERUS	11	0	0	0	11
BLOAT	1	1	0	0	2
BLOOD TEST NEG	2	0	0	0	2
BLOOD TEST POS	2	0	0	0	2
BRONCHITIS	1	0	0	0	1
CALCINOSIS CIRCUMSCRIPTA	0	1	0	0	1
CARDIAC FAILURE	3	0	3	2	8
CARDIAC TAMPONADE	2	0	0	0	2
CARDIOMYOPATHY	1	0	0	0	1
CELLULITIS	0	1	0	0	1
CHILLING	0	1	0	0	1
COLITIS	2	3	0	2	7
CYST	1	0	0	0	1
CYST					
ADNEXAL	2	0	0	0	2
EPIDERMOID	0	0	0	1	1
DEFICIENCY					
MALNUTRITION	12	4	1	1	18
PHOSPHORUS	1	0	0	0	1
SELENIUM	0	1	0	0	1
STARVATION	0	0	2	0	2
DEHYDRATION	1	0	0	0	1
DERMATITIS	6	6	2	7	21
ALLERGIC	1	0	0	0	1
MYCOSIS	1	1	0	0	2
DERMATOMYCOSIS	2	0	0	0	2

EQUINE DISEASES
(Includes Mule, Donkey, Equidae, if any)

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
DYSTOCIA	6	2	1	0	9
EMACIATION	3	1	0	1	5
ENCEPHALITIS					
NONSUPPURATIVE	1	0	0	0	1
SUPPURATIVE	0	2	0	1	3
ENCEPHALOMALACIA	1	0	1	0	2
ENCEPHALOPATHY OTHER	2	0	0	0	2
ENDOCARDITIS	1	0	0	0	1
ENTERITIS					
CHRONIC	1	0	0	0	1
HEMORRHAGE	0	0	0	1	1
NECROTIC	1	0	0	0	1
PARASITE	2	1	0	0	3
UNKNOWN	5	1	0	0	6
ENTEROTOX C	0	0	0	1	1
FAT NECROSIS	1	0	0	0	1
FEED ANALYSIS	1	0	0	0	1
FIBROSIS	1	0	0	0	1
FOR CULTURE	110	11	39	0	160
FOR CYTOLOGY	5	0	0	1	6
FOR HEMATOLOGY	6	1	9	0	16
FOR SEROLOGY	1	0	0	0	1
FOR URINALYSIS	0	0	1	0	1
FRACTURE	2	1	3	0	6
GASTRITIS	1	0	0	0	1
GASTROENTERITIS	0	0	0	1	1

EQUINE DISEASES
(Includes Mule, Donkey, Equidae, if any)

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
GOITRE	0	2	0	0	2
GRANULATION TISSUE	5	5	0	5	15
GRANULOMA	8	1	3	1	13
GROWTH					
HYPERPLASIA	0	0	0	1	1
INFLAMMATION	12	1	0	0	13
HEPATIC					
CIRRHOSIS	1	0	0	0	1
NECROSIS	4	2	0	0	6
HEPATITIS	0	0	0	1	1
BACTERIAL	3	1	0	1	5
TOXIN	1	1	0	1	3
UNKNOWN	1	0	0	0	1
HERNIA DIAPHRAGMATIC	1	0	0	0	1
HYDROPS AMNII	0	0	1	0	1
HYPOGLYCEMIA	1	0	0	0	1
ICTERUS	0	1	0	0	1
IMPACTION	0	1	0	0	1
LAB EXAMS NEG	19	46	26	46	137
LAMINITIS	1	0	1	0	2
LYMPHADENITIS	0	1	0	0	1
MENINGITIS	1	0	0	0	1
BACTERIAL	0	0	0	1	1
MENINGOEN SUPPURATIVE	1	0	0	0	1
METRITIS	1	0	0	0	1
MISCELLANEOUS LAB FINDINGS					
CIRCULATORY	1	3	0	0	4
DIGESTIVE	3	4	1	2	10

EQUINE DISEASES
(Includes Mule, Donkey, Equidae, if any)

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
MISCELLANEOUS LAB FINDINGS (Con't.)					
HEMATOPOIETIC	0	1	0	0	1
LIVER	2	1	0	0	3
MUSCLE	1	1	0	0	2
NERVOUS	0	3	1	1	5
OTHER	1	3	0	6	10
REPRODUCTIVE	1	0	0	7	8
RESPIRATORY	1	0	0	1	2
MYCO					
ASPERGILLUS SP	0	0	0	1	1
MICROSPORUM SP	0	0	0	1	1
MYCO SP	1	0	0	0	1
TRICHOPHYTON SP	0	3	2	1	6
MYOCARDITIS	2	0	0	0	2
MYOPATHY	0	0	1	0	1
MYOSITIS	3	0	0	1	4
NEOPLASMS (See table)					
NEGATIVE SALMONELLA	0	2	0	10	12
NEO NATAL DIARRHEA	2	0	0	0	2
NEONATAL ISOERYTHROLYSES	0	0	1	0	1
NEPHRITIS					
GLOMERULO	0	2	0	1	3
OTHER	0	1	0	0	1
NEPHROSIS	1	1	0	0	2
NO DIAGNOSIS	44	3	1	3	51
NO TEST	1	0	0	1	2
NO VISIBLE LESION	5	0	0	3	8
NORMAL TISSUE	1	0	1	2	4
OBSTRUCT INTESTINAL	1	0	0	0	1

EQUINE DISEASES
(Includes Mule, Donkey, Equidae, if any)

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
OMPHALITIS	1	0	0	0	1
OMPHALOPHLEBITIS	0	0	1	0	1
OSTEOPETROSIS	1	0	0	0	1
PARASITISM (See table)					
PARAKERATOSIS	0	0	0	1	1
PERICARDITIS	1	0	0	0	1
PERITONITIS	4	3	0	2	9
PLEURITIS	0	1	1	0	2
PNEUMONIA					
BACTERIAL	0	1	0	2	3
BRONCHO	6	0	0	1	7
CHRONIC NONRESOLVING	1	0	0	0	1
FIBRINOUS	0	1	0	0	1
INHALATION	2	1	0	1	4
INTERSTITIAL	1	0	0	0	1
OTHER	0	1	0	0	1
SUPPURATIVE	0	2	0	1	3
PULMONARY EDEMA	0	3	0	0	3
RABIES NEGATIVE	1	0	0	0	1
RHINOPNEUMONITIS EQUINE	0	1	0	0	1
RUPTURE STOMACH	3	4	1	1	9
SALMONELLOSIS	1	0	0	0	1
SEPTICEMIA					
E COLI	2	1	1	0	4
STREP	1	0	0	0	1
UNKNOWN	5	0	1	0	6
SHIGELLOSIS	6	3	0	0	9
SHOCK	1	0	0	0	1

EQUINE DISEASES
(Includes Mule, Donkey, Equidae, if any)

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
SPECIMEN UNSUITABLE	84	1	1	2	88
SPLENIC HYPERPLASIA	1	0	0	0	1
STILLBORN	0	0	1	0	1
STRANGLES	1	0	0	0	1
STRESS	6	0	0	0	6
TORSION					
INTESTINAL	6	2	2	3	13
MESENTERIC	3	1	0	0	4
OTHER	1	1	0	1	3
STOMACH	2	0	0	0	2
TOXICOSIS (see table)					
TRAUMA	1	6	3	4	14
TYMPANITES	3	0	0	0	3
TYPHLITIS	2	0	0	0	2
ULCER SKIN	1	0	0	0	1
VASCULAR THROMBOSIS	3	1	0	0	4
TOTAL	538	199	132	219	1088

CANINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABORTION OTHER	0	0	0	1	1
ABSCESS	0	0	1	0	1
ACANTHOSIS NIGRICANS	0	1	0	0	1
ANEMIA					
HEMORRHAGE	3	0	0	0	3
OTHER	2	0	1	1	4
ANOMALY	0	0	0	1	1
CARDIOVASCULAR	1	1	0	0	2
UROGENITAL	1	0	0	0	1
ARTHRITIS POLY	1	0	0	0	1
ASPHYXIATION	1	0	1	0	2
BACTERIA					
ACTINOMYCES SP	0	0	1	0	1
BORD BRONCHISEPTICA	1	0	0	0	1
CAMPYLOBACTER SP	0	0	0	1	1
CORYNE SP	0	0	1	0	1
E COLI	7	1	0	2	10
KLEBSIELLA	1	0	0	0	1
LISTERIA MONOCYTOGENES	1	0	0	0	1
MIXED CULTURE	2	0	0	0	2
MORAXELLA SP	1	0	0	0	1
NOCARDIA SP	0	1	0	0	1
PROTEUS SP	7	1	0	1	9
PSEUDOMONAS SP	3	1	2	1	7
STAPH AUREUS	0	9	1	5	15
STAPH SP	26	0	2	2	30
STREP CANIS	2	0	0	0	2
STREP SP	4	1	0	2	7
CARDIAC					
FAILURE	3	2	0	1	6
TAMPONADE	1	1	0	0	2
CARDIOMYOPATHY	8	4	0	0	12
CELLULITIS	1	0	2	1	4
COLITIS	1	0	0	0	1

CANINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
CYST					
ADNEXAL	0	0	1	0	1
CORPEUS LUTEUM	1	0	0	0	1
EPIDERMOID	1	0	0	0	1
SALIVARY	1	0	0	1	2
SEBACEOUS	1	0	0	0	1
	0	0	1	0	1
CYSTITIS	5	1	0	0	6
DEFICIENCY MALNUTRITION	3	2	0	1	6
DERMATITIS	21	5	1	4	31
ALLERGIC	2	0	0	5	7
BACT	2	0	0	1	3
FOOT	0	0	1	0	1
DISSEMINATED INTRAVASCULAR COAGULATION	1	1	0	0	2
DISTEMPER	10	5	0	0	15
DYSTOCIA	1	0	0	0	1
EMACIATION	1	2	0	0	3
ENCEPHALITIS					
NONSUPPURATIVE	3	2	0	0	5
OTHER	2	3	0	0	5
SUPPURATIVE	1	0	0	0	1
ENCEPHALOMALACIA	1	1	0	0	2
ENCEPHALOPATHY OTHER	5	0	0	0	5
ENDOMETRITIS	3	1	0	0	4
ENTERITIS					
HEMORRHAGE	1	1	0	1	3
NECROTIC	0	0	0	1	1
ULCERATIVE	0	1	0	0	1
UNKNOWN	6	1	0	1	8
VIRAL	12	10	3	3	28
EPIDIDYMITIS	1	0	0	0	1

CANINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
FIBROSIS	0	0	0	1	1
FOR CULTURE	65	2	15	0	82
FOR CYTOLOGY	1	1	0	1	3
FOR IDENTIFICATION	2	0	0	0	2
FRACTURE	1	0	1	0	2
GASTRITIS	0	0	1	0	1
GINGIVITIS	0	1	0	0	1
GRANULATION TISSUE	1	0	0	1	2
GRANULOMA	3	0	2	3	8
GROWTH					
HYPERPLASIA	1	0	0	1	2
INFLAMMATION	14	0	0	5	19
GUNSHOT	0	1	1	0	2
HEPATIC					
CIRRHOSIS	0	1	0	0	1
FIBROSIS	1	0	0	0	1
LIPIDOSIS	0	1	0	1	2
NECROSIS	0	1	0	0	1
HEPATITIS	2	0	0	0	2
ICH	0	0	1	0	1
TOXIN	0	1	0	0	1
UNKNOWN	0	1	0	0	1
HERNIA DIAPHRAGMATIC	1	0	0	0	1
HYDROCEPHALUS	2	0	0	1	3
HYPERPLASIA					
CYST	0	0	0	1	1
ENDOMETRIAL	1	0	0	1	2
PANCREAS	1	0	0	0	1
HYPOGLYCEMIA	1	0	0	0	1

CANINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
HYPOPLASIA RENAL	1	0	0	0	1
HYPOTHYROIDISM	1	0	0	0	1
ICTERUS	1	0	0	0	1
INTESTINAL PERFORATION	1	0	0	0	1
INTUSSUSCEPTION	0	1	2	0	3
LAB EXAMS NEGATIVE	60	27	6	33	126
LARYNGITIS	1	0	0	0	1
LYMPHADENITIS	2	0	0	0	2
MASTITIS	0	0	0	1	1
MENINGITIS	1	4	0	1	6
BACTERIAL	0	1	0	0	1
MENINGOEN NONSUPPURATIVE	1	1	0	0	2
MISCELLANEOUS LAB FINDINGS					
BONES & JOINTS	0	0	0	1	1
CIRCULATORY	1	2	0	0	3
DIGESTIVE	1	0	0	2	3
EYE & EAR	2	0	0	0	2
LIVER	1	0	0	0	1
NERVOUS	1	1	0	2	4
OTHER	4	1	0	6	11
REPRODUCTIVE	1	0	0	1	2
RESPIRATORY	2	1	0	1	4
MYCO					
ASPERGILLUS SP	0	0	0	1	1
TRICHOPHYTON SP	0	0	1	0	1
YEAST	2	3	2	0	7
MYCOSIS	1	0	0	0	1
MYOCARDITIS	2	0	0	0	2
MYOPATHY	0	0	0	1	1

CANINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
NEOPLASMS (see table)					
NEGATIVE SALMONELLA	0	0	0	2	2
NEPHRITIS					
GLOMERULO	3	1	0	0	4
INTERSTITIAL	1	0	0	0	1
PYELO	2	1	0	0	3
NEPHROCALCINOSIS	1	1	0	0	2
NEPHROSCLEROSIS	1	2	0	0	3
NEPHROSIS	1	4	0	0	5
NO DIAGNOSIS	33	8	1	2	44
NO VISIBLE LESION	8	0	0	3	11
NORMAL TISSUE	1	0	0	1	2
OBSTRUCT INTESTINAL	1	1	0	0	2
ORCHITIS	1	0	0	1	2
PARASITISM (see table)					
PANCREATIC NECROSIS	4	1	0	1	6
PERITONITIS	4	0	0	0	4
PLEURITIS	2	0	0	0	2
PNEUMONIA					
BRONCHO	4	0	0	0	4
INHALATION	2	1	0	1	4
INTERSTITIAL	3	1	0	0	4
OTHER	4	2	0	0	6
PARASITIC	0	1	0	0	1
SUPPURATIVE	1	1	0	0	2
VIRAL	1	1	0	0	2
POLIOENCEPHALOMALACIA	0	1	0	0	1
PROSTATITIS	1	0	0	0	1

CANINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
PULMONARY					
EDEMA	5	0	0	1	6
FIBROSIS	1	0	0	0	1
PYOMETRA	2	0	0	1	3
PYOTHORAX	1	0	0	0	1
RABIES NEGATIVE	12	4	3	0	19
RHINITIS	0	1	0	0	1
RUMEN OVERLOAD	0	0	0	1	1
RUPTURE BLADDER	0	1	0	0	1
SALMONELLA SP	0	0	0	1	1
SALMONELLOSIS	2	0	0	0	2
SEPTICEMIA					
E COLI	1	1	0	0	2
STAPHYLOCOCCAL	3	0	0	0	3
STREPTOCOCCAL	0	2	0	0	2
UNKNOWN	0	0	0	1	1
SHOCK	3	0	0	0	3
SPECIMEN UNSUITABLE	1	1	0	1	3
STILLBORN	1	0	0	0	1
TONSILLITIS	2	0	0	0	2
TORSION					
INTESTINAL	1	0	0	0	1
MESENTERIC	1	3	0	0	4
OTHER	1	1	0	0	2
STOMACH	3	2	0	0	5
TOXICOSIS (see table)					
TRAUMA	13	9	0	0	22

CANINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ULCER GASTRIC	1	0	0	0	1
UREMIA	0	1	0	0	1
URETHRAL OBSTRUCTION	0	1	0	0	1
URINARY CALCULI	5	0	0	0	5
TOTAL	485	165	55	120	825

FELINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABORTION					
BACTERIAL	0	1	0	1	2
MUMMIFIED	0	0	0	1	1
ABSCESS	1	0	0	0	1
ANEMIA					
APLASTIC	1	0	0	0	1
HEMORRHAGE	4	1	0	1	6
OTHER	2	0	0	0	2
ANOMALY CARDIOVASCULAR	0	2	0	0	2
BACTERIA					
C PYOGENES	0	1	0	0	1
E COLI	3	0	0	0	3
E COLI HEMO	1	0	0	0	1
KLEBSIELLA	1	0	0	0	1
PAST MULTOCIDA	6	0	1	1	8
PAST SP	1	0	0	0	1
STAPH SP	7	0	0	0	7
STREP SP	1	0	0	1	2
BRONCHITIS	1	0	0	0	1
CARDIAC FAILURE	4	1	0	0	5
CARDIOMYOPATHY	7	5	0	1	13
CHYLOTHORAX	0	1	0	0	1
COLITIS	2	0	0	0	2
CONJUNCTIVITIS	1	0	0	0	1
CYST	0	0	1	0	1
EPIDERMOID	1	0	0	0	1
SEBACEOUS	1	0	0	0	1
CYSTITIS	1	2	0	0	3
DEFICIENCY MALNUTRITION	4	0	0	0	4
DERMATITIS	3	0	0	0	3

FELINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
DIABETES	1	0	0	0	1
EMACIATION	3	0	0	1	4
ENCEPHALITIS NONSUPPURATIVE	1	0	0	0	1
ENCEPHALITIS OTHER	1	1	0	0	2
ENTERITIS					
INFECTIOUS FELINE	0	1	0	0	1
NECROTIC	1	0	0	0	1
UNKNOWN	1	0	0	0	1
VIRAL	0	3	0	0	3
EXPERIMENTAL	8	0	0	0	8
FOR CULTURE	29	0	6	0	35
FRACTURE	1	0	0	0	1
GASTRITIS	1	0	0	0	1
GINGIVITIS	1	0	0	0	1
GLOSSITIS	1	0	0	0	1
GRANULATION TISSUE	1	0	0	1	2
GRANULOMA	2	0	0	1	3
GROWTH					
HYPERPLASIA	2	0	0	0	2
INFLAMMATION	3	0	0	0	3
HEPATIC LIPIDOSIS	1	0	0	0	1
HEPATITIS UNKNOWN	1	0	0	0	1
HERNIA DIAPHRAGMATIC	1	0	0	0	1
HYPOPLASIA CEREBELLAR	1	0	0	0	1
IMPACTION	1	0	0	0	1
INFECTIOUS FELINE PERITONITIS	3	0	0	1	4

FELINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
INTUSSUSCEPTION	1	0	0	0	1
LAB EXAMS NEG	28	14	6	11	59
LYMPHADENITIS	1	1	0	0	2
MENINGITIS	0	2	0	1	3
MISCELLANEOUS LAB FINDINGS					
CIRCULATORY	1	0	0	0	1
DIGESTIVE	2	2	0	0	4
HEMATOPOIETIC	0	1	0	0	1
LIVER	2	0	0	0	2
NERVOUS	2	0	0	0	2
OTHER	1	1	0	4	6
MYCO CANDIDA SP	1	0	0	0	1
MYOCARDITIS	1	0	0	0	1
NEOPLASMS (See table)					
NEPHRITIS					
GLOMERULO	4	0	0	0	4
INTERSTITIAL	1	2	0	0	3
NEPHROSIS	3	1	0	0	4
NO DIAGNOSIS	10	6	1	2	19
NO VISIBLE LESION	2	0	0	2	4
NORMAL TISSUE	2	0	0	0	2
OSTEODYSTROPHY	1	0	0	0	1
OTITIS	1	0	0	0	1
OTITIS MEDIA	0	2	0	0	2
PARASITISM (See table)					
PANCREATIC NECROSIS	1	1	0	0	2
PANLEUKOPENIA	13	2	0	4	19

FELINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
PERITONITIS	0	1	0	1	2
PLEURITIS SUPPURATIVE	0	1	0	0	1
PNEUMONIA					
BACTERIAL	1	0	0	0	1
GRANULOMATOUS	0	0	0	1	1
INHALATION	1	0	0	0	1
OTHER	2	0	0	0	2
POLIOENCEPHALOMALACIA	1	0	0	1	2
PULMONARY EDEMA	6	0	0	0	6
PULMONARY EMPHYSEMA	2	0	0	0	2
PYOTHORAX	2	0	1	0	3
RABIES NEGATIVE	13	8	1	0	22
REPRODUCTIVE DISORDER	1	0	0	0	1
RHINITIS	1	0	0	0	1
SALMONELLA SP	2	0	0	0	2
SEPTICEMIA					
PASTEURELLA	0	0	0	1	1
STAPH	1	0	0	0	1
STREP	1	0	0	0	1
UNKNOWN	1	0	0	0	1
SHOCK	1	0	0	0	1
SINUSITIS	1	0	0	0	1
SPECIMEN UNSUITABLE	0	1	0	0	1
TOXICOSIS (See table)					
TRAUMA	12	8	2	0	22
ULCER					
GASTRIC	0	1	0	0	1
SKIN	2	0	0	0	2

FELINE DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
UREMIA	3	0	0	0	3
URETHRAL OBSTRUCTION	2	1	0	0	3
URINARY CALCULI	5	0	0	0	5
TOTAL	257	75	19	38	389

LABORATORY ANIMALS

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	HAMSTER	MOUSE	RAT	TOTAL
Anemia Hemorrhage	0	0	2	2
Bacteria				
Klebsiella	0	0	2	2
Pasteurella Sp	0	1	0	1
Staph Aureus	0	0	1	1
Streptococcal Sp	0	0	2	2
Dermatitis	0	1	0	1
Diabetes	0	0	3	3
Emaciation	1	0	0	1
Encephalit Other	0	0	1	1
Enterit Necrotic	1	0	0	1
Experimental	0	0	1	1
For Culture	0	1	18	19
Gangrene	0	1	0	1
Hepatitis	0	0	2	2
Lab Exams Negative	0	2	10	12
Metritis	0	0	1	1
Miscellaneous Lab Findings				
Eye and Ear	1	0	0	1
Reproductive	0	0	1	1
Respiratory	0	0	1	1
Myocarditis	0	0	1	1
Neoplasms (see table)				
Negative Salmonella	2	0	0	2
Nephrosis	0	0	2	2

LABORATORY ANIMALS

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	HAMSTER	MOUSE	RAT	ROTAL
No Diagnosis	0	1	2	3
No Visible Lesion	0	1	2	3
Parasitism (see table)				
Peritonitis	0	0	1	1
Pneum Interstitial	0	0	1	1
Rabies Negative	0	3	0	3
Septicemia Unknown	0	0	2	2
Stomatitis	1	0	0	1
Specimen Unsuitable	0	0	1	1
Unsatisfactory	1	0	0	1
TOTAL	7	11	57	75

RABBIT DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
ABSCESS	2	0	0	0	2
ASCITES	2	0	0	0	2
BACTERIA					
BACTEROIDES	1	0	0	0	1
BORD BRONCHISEPTICA	1	0	0	0	1
BORDETELLA SP	0	0	0	1	1
PAST MULTOCIDA	1	0	1	0	2
STAPH SP	1	0	0	0	1
CARDIAC FAILURE	3	0	0	0	3
CARDIOMYOPATHY	1	4	0	0	5
COCCIDIOS					
HEPATIC	1	2	1	0	4
INTESTINAL	0	2	0	0	2
COLITIS	1	0	0	0	1
CYSTITIS	1	0	0	0	1
EMACIATION	2	0	0	0	2
ENCEPHALITIS					
NONSUPPURATIVE	1	0	0	0	1
OTHER	4	0	0	0	4
ENTERIC COLIBACILLOSIS	0	1	0	0	1
ENTERITIS					
CATARRHAL	1	0	0	0	1
HEMORRHAGE	0	0	0	1	1
NECROTIC	0	1	0	0	1
UNKNOWN	2	0	2	0	4
EXPERIMENTAL	0	0	1	0	1
FOR CULTURE	2	0	0	0	2
GASTRITIS	0	0	0	1	1
GOITRE	0	1	0	0	1
HEPATIC NECROSIS	1	0	0	0	1

RABBIT DISEASES

DIAGNOSIS	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
HEPATITIS	1	0	0	0	1
UNKNOWN	2	0	0	0	2
LAB EXAMS NEGATIVE	2	1	0	0	3
MISCELLANEOUS LAB FINDINGS					
DIGESTIVE	0	1	0	0	1
NEOPLASMS (See table)					
NEPHRITIS					
GLOMERULO	1	0	0	0	1
INTERSTITIAL	1	0	1	0	2
PYELO	0	1	0	0	1
NO DIAGNOSIS	2	2	0	0	4
NO VISIBLE LESION	2	0	0	0	2
OBSTRUCT INTESTINAL	0	0	1	0	1
OTITIS MEDIA	4	0	0	0	4
PARASITISM (See table)					
PNEUMONIA					
BACTERIAL	1	0	0	0	1
BRONCHO	1	1	0	2	4
CHRONIC NONRESOLVING	1	0	0	0	1
PASTEURELLA	1	0	0	0	1
PULMONARY EDEMA	0	1	0	0	1
RABIES NEGATIVE	1	0	0	0	1
RUPTURE STOMACH	0	0	1	0	1
SALMONELLOSIS	1	0	0	0	1
SEPTICEMIA PASTEURELLA	2	1	0	2	5
SPECIMEN UNSUITABLE	1	1	0	0	2
TRAUMA	1	2	0	1	4

RABBIT DISEASES

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
TYPHLITIS	1	0	0	0	1
VASCULAR THROMBOSIS	1	0	0	0	1
TOTAL	55	22	8	8	93

FUR-BEARING ANIMALS

(Airdrie, Fairview, and Lethbridge included)

DISEASE	CHINCHILLA	FOX	MINK	RANCH FOX
Aleutian Disease	0	0	2	0
Anomaly Cardiac	0	0	1	0
Atresia ani	1	0	0	0
Bacteria				
Listeria	1	0	0	0
Proteus Sp	1	0	0	0
Pseudomonas Sp	1	0	0	0
Bloat	0	0	0	1
Cardiac Failure	0	0	0	2
Cardian Tamponad	0	0	1	0
Deficiency Malnutrition	1	0	0	0
Emaciation	7	0	0	1
Encephalitis Bacterial	0	0	1	0
For Analysis	0	0	0	1
For Culture	0	0	0	1
For Identification	0	0	2	0
For Serology	0	0	10	0
Hypothyroidism	0	0	0	2
Lab Exams Negative	1	0	1	1
Listeriosis	3	0	0	0
Malocclusion	1	0	0	0
Meningitis Bacterial	0	0	1	0

FUR-BEARING ANIMALS

(Airdrie, Fairview and Lethbridge included)

DISEASE	CHINCHILLA	FOX	MINK	RANCH FOX
Meningoencephalitis	1	0	0	0
Miscellaneous Lab Findings				
Digestive	2	0	0	0
Reproductive	1	0	0	0
Negative Salmonella	0	0	1	0
Nephritis Interstitial	0	0	1	0
No Diagnosis	1	0	1	1
No Visible Lesion	0	0	0	2
Parasitism (see table)				
Pneum Bacterial	1	0	1	0
Prolapse rectum	0	0	0	1
Pulmonary Edema	0	0	1	2
Pyothorax	0	0	0	1
Rabies Negative	0	0	1	0
Rupture Uterus	1	0	0	0
Septicemia				
Pseudomonas	2	0	0	0
Streptococcal	0	0	1	0
Stress	1	0	0	0
Toxicosis Negative	0	1	0	0
Ulcer Gastric	0	0	1	0
Urinary Calculi	1	0	0	0
TOTAL	28	1	27	16

FISH, AMPHIBIAN & REPTILE DISEASES

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
FISH					
Asphyxiation	1	0	0	0	1
Bacteria					
Acid Fast	2	0	0	0	2
Kidney	11	0	0	0	11
Nocardia Sp	1	0	0	0	1
Pseudomonas	0	0	1	0	1
Cataract	2	0	0	0	2
Columnaris	1	0	0	0	1
Cyst	1	0	0	0	1
Dermatitis	10	0	0	0	10
Bacterial	3	0	0	0	3
Experimental	53	0	0	0	53
Fin Rot	2	0	0	0	2
For Identification	1	0	0	0	1
Gill Rot	1	0	0	0	1
Granuloma	1	0	0	0	1
Hepatic Necrosis	0	2	0	0	2
Hepatitis	1	0	0	0	1
Lab Exams Negative	29	2	0	0	29
Lymphocyst	1	0	0	0	1
Meningitis	0	1	0	0	1
Miscellaneous Lab Findings					
Bones & Joints	1	0	0	0	1
Liver	1	0	0	0	1
Muscle	1	0	0	0	1
Other	4	1	0	0	5
Respiratory	4	0	0	0	4

FISH, AMPHIBIAN & REPTILE DISEASES

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBIDGE	TOTAL
Myositis	3	0	0	0	3
Neoplasm					
Adenoc	0	1	0	0	1
Carcinoma	0	1	0	0	1
Fibroma	2	0	0	0	2
Lipoma	1	0	0	0	1
Lymphosarcoma	2	0	0	1	3
Nephritis Other	1	0	0	0	1
Nephrocalcinosis	2	0	0	0	2
No Diagnosis	4	2	0	0	6
No Test	1	0	0	0	1
No Visible Lesions	8	0	0	2	10
Parasitism					
Flukes	2	0	0	0	2
Other	9	0	0	0	9
Myxosporidia	4	0	0	0	4
Tapeworms	2	0	0	1	3
Pericarditis	1	0	0	0	1
Peritonitis	2	0	0	1	3
Scoliosis	1	0	0	0	1
Septicemia unknown	1	0	0	0	1
Specimen Unsuitable	9	0	0	0	9
Suitable Animals	22	0	0	0	22
Toxicosis					
Negative	1	0	0	0	1
Nitrite	1	0	0	0	1
Trauma	1	0	0	1	2
Tuberculosis	1	0	0	0	1

FISH, AMPHIBIAN & REPTILE DISEASES

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Tuberculosis	1	0	0	0	1
AMPHIBIAN					
Bacterial					
Proteus Sp	1	0	0	0	1
Other	1	0	0	0	1
Pneumonia					
Bacterial	1	0	0	0	1
Chronic	1	0	0	0	1
REPTILE					
Abscess	1	0	0	0	1
Bacterial					
Pseudomonas	0	0	1	0	1
Salmonella	2	0	0	0	2
Emaciation	1	0	0	0	1
For Culture	3	0	1	0	4
For Identification	1	0	0	0	1
Gout Visceral	1	0	0	0	1
Lab Exams Negative	3	0	0	0	3
Miscellaneous Lab Findings					
Digestive	1	0	0	0	1
Nephrosis	1	0	0	0	1
Pneumonia Bacterial	1	0	0	0	1
Salmonella	2	0	0	0	2
TOTAL	238	10	3	6	257

EXOTIC PETS, WILDLIFE, ZOO ANIMALS DISEASES

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	EXOTIC PETS	WILD ANIMALS	ZOO ANIMALS
Abomasitis	1	3	0
Abortion Idiopathic	1	0	0
Listeria	0	0	1
Abscess	0	5	0
Liver	0	1	0
Air sacculitis	1	0	0
Alopecia	0	1	0
Amyloidosis	0	0	1
Anemia hemorrhage	0	0	2
Aneurysm	1	0	0
Anomaly			
Cardiovascular	0	0	1
Nervous	0	0	1
Arteriosclerosis	0	0	1
Arthritis			
Degenerative	0	0	1
Staphylococcus	0	1	0
Aspergillosis	0	0	1
Bacteria			
Cl Septicum	0	0	1
E coli	0	1	0
Salmonella Sp	0	0	8
Staph Aureus	1	0	0
Strep zooepidemicus	0	0	1
Yersinia	0	2	0
Balanoposthitis	0	1	0
Bloat	0	0	1
Botulism	0	0	4

EXOTIC PETS, WILDLIFE, ZOO ANIMALS DISEASES

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	EXOTIC PETS	WILD ANIMALS	ZOO ANIMALS
Cannibalism	0	0	1
Cardiac			
Failure	0	0	4
Rupture	0	0	1
Tamponade	0	1	1
Cardiomyopathy	0	1	0
Cellulitis	0	0	1
Coccidios Intestinal	0	1	1
Conjunctivitis	0	0	1
Corneal Opacity	0	0	1
Cystitis	0	0	1
Deficiency			
Malnutrition	2	5	3
Starvation	0	1	1
Vitamin C	2	0	0
Dehydration	0	0	2
Dermatitis	0	2	1
Diabetes	0	0	1
Distemper	0	1	0
Emaciation	5	9	12
Encephalitis			
Other	0	1	0
Suppurative	0	1	0
Endocarditis	0	0	1
Endocardiosis	0	0	1
Enteric Colibacillosis	0	1	1

EXOTIC PETS, WILDLIFE, ZOO ANIMALS DISEASES

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	EXOTIC PETS	WILD ANIMALS	ZOO ANIMALS
Enteritis			
Chronic	0	0	1
Hemorrhage	0	1	0
Necrotic	0	0	1
Ulcerative	0	0	1
Unknown	1	0	1
Viral	0	0	1
Encephalomalacia	0	1	0
Experimental	0	1	0
Fat Necrosis	0	0	1
Fibrosis	1	0	0
For Analysis	0	1	0
For Culture	3	9	21
For Identification	0	18	11
For Serology	0	1	0
Fracture	0	3	2
Gastritis	0	1	0
Granuloma	0	1	0
Growth Inflammation	0	0	1
Hepatic			
Lipidosis	0	0	1
Necrosis	1	1	3
Hepatitis	1	1	0
Bacterial	0	0	1
Hyperkeratosis	0	0	1
Impaction oviduct	0	0	1

EXOTIC PETS, WILDLIFE, ZOO ANIMALS DISEASES

(Airdrie, Fairview and Lethbridge included)

DIAGNOSIS	EXOTIC PETS	WILD ANIMALS	ZOO ANIMALS
Infectious Bovine Rhinotracheitis Neonatal	1	0	0
Intestinal Intussusception	0	0	1
Keratis	0	1	0
Lab Exams Negative	6	22	70
Lymphadenitis	0	1	0
Malocclusion	0	0	1
Mastitis coliform	0	1	0
Meningitis	0	1	1
Bacterial	0	0	1
Meningoencephalitis suppurative	1	0	1
Metritis	0	0	1
Miscellaneous Laboratory Findings			
Circulatory	0	0	2
Digestive	0	1	1
Eye & Ear	0	2	0
Liver	0	0	1
Nervous	0	0	1
Other	1	9	2
Reproductive	0	1	6
Respiratory	0	0	1
Myco Penicillium Sp	0	0	1
Myco Trichophyton Sp	0	1	0
Myocarditis	0	0	1
Myopathy	0	1	0
Nutritional	1	0	0
Negative Salmonella	1	0	0

EXOTIC PETS, WILDLIFE, ZOO ANIMALS DISEASES

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	EXOTIC PETS	WILD ANIMALS	ZOO ANIMALS
Neoplasm			
Fibroma	0	2	0
Other	0	0	1
Papilloma	0	0	1
Nephritis			
Glomerulo	0	0	2
Interstitial	1	1	1
Nephrosis	0	2	0
No Diagnosis	5	6	12
No Test	0	0	1
No Visible Lesion	2	4	0
Normal Tissue	0	10	0
Obstruct Intestinal	0	1	0
Omphalophlebitis	0	0	1
Osteodystrophy	0	0	1
Osteomyelitis	0	0	2
Parasitism (see table)			
Pending	0	1	0
Peritonitis	0	0	3
Pneumonia			
Bacterial	0	0	1
Broncho	0	0	3
Chronic	0	2	0
Gangrenous	0	4	0
Inhalation	0	2	1
Interstitial	0	0	2
Mycotic	0	1	0

EXOTIC PETS, WILDLIFE, ZOO ANIMALS DISEASE

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	EXOTIC PETS	WILD ANIMALS	ZOO ANIMALS
Pneumonia (Con't.)			
Other	0	0	2
Parasitic	0	0	1
Suppurative	0	1	1
Polioencephalomalacia	0	1	0
Pox Avian	0	0	1
Prolapse Rectum	0	0	1
Prostatitis	0	1	0
Rabies Negative	0	19	0
Rhinitis	1	0	0
Reproductive	0	0	1
Rumenitis	0	1	1
Salmonellosis	1	1	1
Septicemia			
Aeromonas	1	0	2
Pasteurella	0	0	1
Staphylococcus	0	2	0
Streptococcal	0	0	2
Unknown	0	1	6
Shock	0	0	1
Specimen Unsuitable	0	2	2
Steatis	0	0	1
Starveout	1	0	0
Stillborn	0	0	2
Stomatitis	1	0	0

EXOTIC PETS, WILDLIFE, ZOO ANIMALS DISEASES

(Airdrie, Fairview, and Lethbridge included)

DIAGNOSIS	EXOTIC PETS	WILD ANIMALS	ZOO ANIMALS
Suitable for Human Use	0	2	0
Toxicosis			
Negative	0	0	2
Organophosphate	0	0	1
Nitrate	0	1	0
Strychnine	0	2	0
Trauma	0	7	10
Tuberculosis	1	0	0
Tularemia	0	1	0
Typhlitis	0	1	0
Ulcer Gastric	0	0	1
Vascular Thrombosis	0	0	1
TOTAL	46	198	272

RABIES SUMMARY

SPECIES	LOCATION	NUMBER POSITIVE	DATE CONFIRMED
Bat	Co. of Camrose	1	June 14
Bat	Co. of Newell	1	July 27
Skunk	Co. of Warner	1	August 20
Bat	Co. of Lethbridge	1	August 30
Skunk	Co. of Warner	1	September 3
Bat	I.D. 1	1	September 4
Skunk	Co. of Warner	1	September 9
Skunk	Co. of Warner	1	September 13
Skunk	Co. of Warner	1	September 23
Skunk	Co. of Warner	1	October 21
Skunk	County of Newell	1	December 11
Skunk	M.D. 6	1	December 11

TOTALS	SKUNKS	8
	BATS	4
		12

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
BUDGIE					
Air Sacculitis	3	1	0	0	4
Aspergillosis	1	0	0	0	1
Asphyxiation	2	0	0	0	2
Atrophy Muscle	0	1	0	0	1
Bacteria					
Enterobacter	0	1	0	0	1
Klebsiella	0	1	0	0	1
Strep Sp	0	1	0	0	1
Candidiasis	7	0	0	0	7
Chlamydiosis	2	2	0	0	4
Conjunctivitis	1	0	0	0	1
Deficiency					
Cal Phos Imbalance	0	1	0	0	1
Malnutrition	0	1	0	0	1
Vitamin A	0	1	0	0	1
Eggbound	1	0	0	0	1
Emaciation	3	3	0	0	6
Fatty Liver	2	0	0	0	2
For Culture	5	2	0	0	7
For Identification	0	3	0	0	3
Gizzard Impaction	1	0	0	0	1
Goitre	0	2	0	0	2

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Heart Failure	1	0	0	0	1
Hematoma	1	0	0	0	1
Hepatitis	2	3	0	0	5
Hepatitis Bacterial	1	0	0	0	1
Hepatitis Unknown	3	0	0	1	4
Hyperpl Thyroid	5	0	0	0	5
Lab Exams Neg	3	12	0	0	15
Leukosis Lymphoid	0	1	0	0	1
Leukosis Myelogenous	1	0	0	0	1
Miscellaneous Lab Findings					
Digestive	1	0	0	0	1
Other	0	1	0	0	1
Urinary	0	1	0	0	1
Myco Sp	0	1	0	0	1
Myopathy	0	1	0	0	1
Neoplasm					
Adenoc	0	1	0	0	1
Adenoc Biliary	1	0	0	0	1
Adenoma	0	2	0	0	2
Carc Squamous	0	2	0	0	2
Carc Thyroid	0	1	0	0	1
Carcinoma	1	0	0	0	1
Embryonal Nephroma	1	1	0	0	2

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBIRDGE	TOTAL
Neoplasm (Con't.)					
Fibroma	0	1	0	0	1
Fibropapilloma	0	1	0	0	1
Fibrosarcoma	4	6	0	0	10
Hemangiosarcoma	1	0	0	0	1
Lipoma	1	0	0	0	1
Lymphosarcoma	1	1	0	0	2
Myelosarcoma	1	0	0	0	1
Nephroma	2	1	0	0	3
Rhabdomyosarcoma	1	0	0	0	1
Sarcoma Undifferentiated	0	1	0	0	1
Nephritis Glomerulo	1	0	0	0	1
Nephrosis	1	0	0	0	1
No Diagnosis	7	4	0	0	11
Pericarditis	0	1	0	0	1
Pneumonia Mycotic	1	0	0	0	1
Proventriculitis	1	0	0	0	1
Reproductive	1	0	0	0	1
Septicemia					
E Coli	1	0	0	0	1
Pseudomonas	1	0	0	0	1
Stress	2	0	0	1	3
Tracheitis	1	0	0	0	1

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Trauma	3	0	0	0	3
Tuberculosis	0	1	0	0	1
Ulcer Gizzard	3	0	0	0	3
Xanthomatosis	0	1	0	0	1
CANARY					
Air Sacculitis	0	1	0	0	1
Bacteria Mycob TB	0	1	0	0	1
Dehydration	0	1	0	0	1
Emaciation	0	2	0	0	2
For Culture	1	1	0	0	2
For Identification	0	1	0	0	1
Gout Visceral	1	0	0	0	1
Granuloma	0	1	0	0	1
Hepatitis	1	0	0	0	1
Necrotic	0	1	0	0	1
Unknown	1	0	0	0	1
Hyperpl Thyroid	1	0	0	0	1
Lab Exams Neg	1	3	0	0	4
Miscellaneous Lab Findings					
Liver	0	1	0	0	1
Other	1	0	0	0	1

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Neoplasm					
Carcinoma	0	1	0	0	1
Lymphosarcoma	0	4	0	0	4
Other	0	1	0	0	1
Sarcoma	0	2	0	0	2
Nephrosis	2	0	0	0	2
No Diagnosis	5	3	0	0	8
Parasitism					
Lice	1	0	0	0	1
Mites	2	1	0	0	3
Pending	1	0	0	0	1
Peritonitis	1	0	0	0	1
Pox	3	0	0	0	3
Septicem E Coli	1	0	0	0	1
Sinusitis	1	0	0	0	1
Torsion Mesenteric	1	0	0	0	1
Trauma	3	0	0	1	4
Ulcer Gizzard	1	0	0	0	1
COCKATEEL					
Air Sacculitis	6	1	0	0	7
Anemia Hemorrhage	1	0	0	0	1
Anomaly Musculoskeletal	1	0	0	0	1

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Bacteria Enterobacter	0	0	0	1	1
Candidiasis	4	0	0	0	4
Cardiac Failure	2	0	0	0	2
Cardiomyopathy	1	0	1	0	2
Chlamydiosis	6	2	0	0	8
Deficiency Malnutrition	0	1	0	0	1
Emaciation	3	2	0	1	6
For Culture	9	1	0	0	10
Gizzard Impaction	0	0	0	1	1
Glossitis	0	1	0	0	1
Goitre	0	1	0	0	1
Gout	0	2	0	0	2
Granulation	1	0	0	0	1
Hepatic Lipidosis	1	0	0	0	1
Hepatitis	2	1	0	0	3
Viral	1	0	0	0	1
Necrotic	0	1	0	0	1
Unknown	1	0	0	0	1
Hepatosis	1	0	0	0	1
Hyperplasia Thyroid	2	0	0	0	2
Hypothyroidism	0	1	0	0	1
Icterus	1	0	0	0	1
Lab Exams Negative	5	16	1	0	22

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Miscellaneous Lab Findings					
Digestive	0	1	0	0	1
Other	0	2	0	0	2
Respiratory	1	1	0	0	2
Myco Candida	0	1	0	0	1
Myopathy Pectoral	0	1	0	0	1
Neoplasm					
Adenoma	1	1	0	0	2
Fibroma	1	0	0	0	1
Fibrosarcoma	1	0	0	0	1
Lipoma	1	0	0	0	1
Lymphosarcoma	3	1	0	0	4
Sarcoma	1	0	0	0	1
Nephritis					
Interstitial	0	1	0	0	1
Other	0	0	0	1	1
Nephrocalcinosis	1	0	0	0	1
Nephrosis	2	1	0	0	3
No Diagnosis	4	4	0	0	8
No Visible Lesion	1	0	0	0	1
Osteomalacia	1	0	0	0	1
Peritonitis	0	1	0	0	1

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Pneumonia					
Bacterial	1	0	0	0	1
Inhalation	2	0	0	0	2
Pulmonary Edema	1	0	0	0	1
Reproductive	1	0	0	0	1
Septicem					
E. Coli	1	0	0	0	1
Pasteurella	0	1	0	0	1
Unknown	0	1	0	0	1
Sinusitis	1	0	0	0	1
Specimen Unsuitable	0	2	0	0	2
Suitable Animals	1	0	0	0	1
Tracheitis	1	0	0	0	1
Trauma	4	0	0	0	4
Ulcer	1	0	0	0	1
COCKATOO					
Anemia Hemorrhage	1	0	0	0	1
Bacteria enterobacter	0	1	0	0	1
Emaciation	2	0	0	0	2
For Culture	4	0	0	0	4
Hepatitis Unknown	1	0	0	0	1

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBRIDGE	TOTAL
Hyperplasia Thyroid	1	0	0	0	1
Lab Exams Negative	0	1	0	0	1
Nephritis Embolic	1	0	0	0	1
Peritonitis	1	1	0	0	2
Septicemia unknown	1	0	0	0	1
Stress	1	0	0	0	1
DUCK					
Amyloidosis	0	1	0	0	1
Arthritis Staphylococcus	0	1	0	0	1
Botulism	1	0	0	0	1
Deficiency					
Calcium	0	0	0	1	1
Phosphorus	0	0	0	1	1
Starvation	0	0	1	0	1
Dehydration	1	0	0	0	1
Enteritis Necrotic	0	1	0	0	1
Experimental	4	0	0	0	4
Fowl Cholera	0	0	0	1	1
Gizzard Impaction	0	0	0	1	1
Lab Exams Negative	1	0	0	0	1
Leg Weakness	1	0	0	0	1

MISCELLANEOUS BIRDS

DISEASE	EDMONTON	AIRDRIE	FAIRVIEW	LETHBIRDGE	TOTAL
Leucocytozoon	2	0	0	0	2
Myopathy	0	0	0	1	1
Nephrosis	1	0	0	0	1
New Duck Syndrome	1	0	0	0	1
No Diagnosis	1	0	0	0	1
No Visible Lesions	0	0	0	1	1
Peritonitis	0	0	0	1	1
Pneumonia					
Mycotic	0	1	0	0	1
Parasitic	1	0	0	0	1
Starveout	1	0	0	1	2
Toxicosis					
Algae	2	0	0	0	2
Ethylene	0	1	0	0	1
Trauma	0	0	0	1	1
Unsuitable Animals	1	0	0	0	1
TOTAL	223	147	3	16	389

MISCELLANEOUS & OTHER SUBMISSIONS
(Feed, water, human, etc.)

(Fairview, Lethbridge, and Airdrie included)

DIAGNOSIS	TOTALS
Bacteria	
Bacillus Sp	1
Listeria Monocytogenes	1
Pseudomonas Sp	1
Salmonella Sp	1
Deficiency Selenium	1
Dermatitis Bacterial	1
Emaciation	1
Experimental	9
Feed Analysis	18
For Culture	12
For Identification	31
Lab Exams Negative	81
Miscellaneous Lab Findings Other	3
Myco	2
Mucor Sp	1
Penicillium	1
Mycosis	1
Negative Salmonella	9
No Diagnosis	7
No Test	3
Normal Tissue	1
Parasitism	
Dermacentor	1
Ticks	2

MISCELLANEOUS & OTHER SUBMISSIONS
(Feed, water, human etc.)

(Fairview, Lethbridge, and Airdrie included)

DIAGNOSIS	TOTALS
Specimen Unsuitable	3
Suitable Animals	44
Suitable for Human Use	1
Toxicosis	
Dicoumarin	1
Mycotoxin	3
Negative	2
Nitrate	1
Other	5
Petroleum	1
Plant	1
Strychnine	3
Unsuitable Animals	3
Virus Unclassified	2
TOTAL	258

FETAL EXAMINATIONS

(Fairview, Airdrie, & Lethbridge Laboratories included)

Disease	Bovine	Porcine	Ovine	Equine
BACTERIAL				
Bacillus	30	-	2	-
Brucella	-	-	-	-
Coliforms	2	-	-	-
Corynebacterium	45	1	3	-
Hemophilus	-	-	-	-
Listeria	16	-	1	-
Streptococcus	14	2	-	2
Campylobacter	4	-	18	-
Staphylococcus	3	-	-	-
Bacterial (U.D.O.)	76	9	4	-
Leptospirosis	-	-	-	-
Other #1	21	3	12	2
VIRAL				
B.V.D.	17 (17)	-	-	-
E.A.E.	-	-	5 (3)	-
E.V.R.	-	-	-	3 (3)
I.B.R.	56 (50)	-	-	-
P.I.3	8 (7)	-	-	-
SMEDI	-	2 (2)	-	-
VIRAL (U.D.O.)	2 (2)	7 (3)	3 (2)	-
MYCOTIC				
Aspergillus	13	-	-	-
Mucor	5	-	-	-
Mycotic (U.D.O.)	23	1	-	-
Abortion Infectious (U.D.O.)	46	-	-	-
Other #2	2	-	-	-
NUTRITIONAL				
Iodine Deficiency	8	-	3	-
Malnutrition	2	-	-	-
Selenium Deficiency	-	-	-	-
Vitamin Deficiency	-	-	-	-

FETAL EXAMINATIONS

(Fairview, Airdrie, & Lethbridge Laboratories included)

Disease	Bovine	Porcine	Ovine	Equine
CONGENITAL DEFECT				
Alimentary System	3	-	-	-
Blood & Immune System	-	-	-	-
Cardiovascular System	31	-	-	2
Eyes & Ears	-	-	-	1
Musculoskeletal System	22	3	1	1
Nervous System	6	1	-	-
Skin, Appendages & Connective Tissues	1	-	-	-
Urogenital Tract	1	-	-	1
Multiple, Metabolic & Other Defects	32	-	1	1
MISCELLANEOUS				
Twinning	16	-	-	3
Dystocia	55	4	2	6
Mummified	22	8	7	1
Specimen Unsuitable	16	1	-	1
Trauma	-	-	-	1
For Identification	14	4	-	3
Other #3	42	28	7	7
NO DIAGNOSIS	719	124	39	59
TOTAL SPECIES	1373	192	111	96

GRAND TOTAL OF ALL SPECIES 1772

FETAL EXAMINATIONS (Continued)

Edmonton Lab Only:

Examinations done for diagnosis of reproductive dysgenesis and disease:

Referrals from other labs	30
Blood Tests	209
Semen Evaluations	42
Biopsies	16

Genital Examinations

Cervical Mucus	66

* Numbers in parenthesis indicates either herd or flock

FETAL EXAMINATIONS (Continued)

#1 Yersinia pseudotuber
Mixed Infection
Pasteurella multocida
Pasteurella hemolytica
Nocardia
Actinobacillus
Actinobacter
Micrococcus
Bacteroides capillosis
Clostridium
Enterobacter
Chlamydia
Actinobacillus equuli
B.E. Coli

#2 Placentitis scopulariopsis
Rhizopus

#3 Placentitis
Pneumonia Suppurative (Chronic)
N Adenoma
Orchitis
N Lymphosarcoma
Stress
MLF Reproductive
Metritis
Trypanosoma theileria
Mismanagement
N Melanoma
Cystic Ovaries
Stillborn
Torsion

PARASITES

(Lethbridge, Fairview and Airdrie included)

	BOVINE	OVINE	EQUINE	PORCINE	CAPRINE
Protozoa					
Coccidia	107	33	1	2	9
Cryptosporidium	10	0	0	0	0
Isopora	0	0	0	0	1
Cestodes					
Cysticercus	2	0	0	0	0
Moniezia	6	2	0	0	0
Nematodes					
Ascarids	0	0	8	22	0
Dictyocaulus	6	1	0	0	0
Haemonchus	0	0	0	0	2
Nematodirus	4	1	0	0	0
Ostertagia	1	2	0	0	2
Parascaris equorum	0	0	7	0	0
Setaria	1				
Strongyles	62	12	81	2	4
Trichuris	4	2	0	0	0
Trichostrongyloidea	11	8	0	0	0
Arthropods					
Lice	20	0	0	0	1
Mites	0	0	0	1	0
Chorioptes	6	0	0	0	0
Sarcoptes	10	0	0	8	0
Mixed Infections	38	7	10	2	1
Other	15	0	1	1	0
TOTAL	303	68	108	38	20

PARASITES

(Lethbridge, Fairview, and Airdrie included)

	CANINE	FELINE	RABBIT	CHICKEN	OTHER
Protozoa					
Coccidia	1	3	11	16	26
Giardia	7	0	0	0	1
Isospora	2	0	0	0	0
Trichomonas	0	0	0	0	1
Cestodes					
Adult	0	0	0	0	4
Cysticercus	0	0	0	0	1
Diphyllobothrium	1	0	0	0	0
Larval	0	0	0	0	2
Moniezia	0	0	0	0	1
Tapeworms	9	0	0	0	1
Nematodes					
Ascarids	1	0	0	10	1
Capillaria	0	0	0	4	9
Dirofilaria	2	0	0	0	0
Nematodirus	0	0	0	0	1
Ostertagia	0	0	0	0	1
Strongyloides	0	0	0	0	10
Toxocara/Toxascaris	1	1	0	0	3
Trichuris	0	0	0	0	3
Other	0	0	0	0	3
Arthropods					
Fleas	2	0	0	0	0
Lice	0	0	0	7	3
Mites	1	0	0	8	3
Sarcoptes	0	0	0	0	3
Ticks	1	0	0	0	3
Mixed Infections	0	0	0	3	21
Other	3	0	0	0	54
TOTAL	31	4	11	48	155

TOXICOSES

(Airdrie, Lethbridge and Fairview included)

	BOVINE	OVINE	EQUINE	CANINE
Ammonia	2	0	0	0
Chlor Hydrocarbon	3	0	0	0
Copper	0	12	0	0
Cyanide	1	0	0	0
Drugs	0	0	0	1
Ethylene Glycol	0	0	0	7
Fuel Oil	1	0	0	0
Lead	42	0	0	0
Negative	5	0	0	6
Nitrate	2	0	0	0
Organophosphate	2	0	0	1
Other	6	1	0	1
Oxalate	0	0	0	1
Petroleum	6	0	0	0
Plant	8	0	7	0
Sodium ion	1	0	0	0
Strychnine	0	0	2	62
Unknown	3	1	0	2
Vitamin A	1	0	0	0
TOTAL	83	14	9	81

TOXICOSES

(Continued)

(Airdrie, Lethbridge and Fairview included)

	FELINE	LAB ANIMALS	RABBIT
Ethylene Glycol	3	0	0
Iron	0	5	0
Negative	0	0	1
Other	1	1	0
Organophosphate	0	1	1
Plant	1	0	0
Selenium	0	1	0
Sodium ion	0	7	0
Strychnine	1	0	0
Unknown	1	2	3
TOTAL	7	17	5

SALMONELLA TABLE 1975 - 1985

POULTRY PARATYPHOID ISOLATES

Salmonella isolations from poultry submissions and environmental samples including Edmonton, Lethbridge Fairview and Airdrie

TYPING	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85
S. agona					2	18	4	2	4	7	4
S. albany					23	42	2	3		1	2
S. anatum					1		1			1	3
S. arizona					1	14	5	11	9	11	22
S. bandaka							2				
S. bareilly				2	6						
S. blockley				1	1						
S. bredoney											2
S. california		1	1		4	46	8	18	3		
S. carrau							4				
S. cerro	3		5	1	2	15	9				1
S. derby							1				
S. eimsbuettel						24	1				
S. enteritidis					1	1	2	3	7	4	1
S. hadar						1					
S. haardt			1	2	24	4	3	1	2		
S. havana						1	5				
S. heidelberg		3	16		21	15	5	1	9	5	3
S. indiana		2	2								
S. infantis	2	13	6	10	52	118	47	25	21	9	10
S. java						4					
S. johannesburg		2									
S. kentucky					1		13	16			
S. kottbus	1	2	1								
S. krusei					1						
S. landau					1						
S. lille						1					
S. litchfield					1	1	13	4	2		
S. manhattan		1	1							3	
S. minnesota				1							
S. molade							3				
S. montevideo		1	2		5	33	1	5	3	2	
S. muenster							1				
S. nienstedten			5	3	18	26	31	5	8	7	
S. newington	1	1	3			2					
S. newport		1		1	7						
S. ohio		4				3				1	
S. oranienburg				3	4			2			
S. rubislaw								1	1		

SALMONELLA TABLE CONTINUED

TYPING	'75	'76	'77	'78	'79	'80	'81	'82	'83	'84	'85
S. saint paul		2		1	43	11	15	5	6		
S. schwarzengrund					6	2	9	6	6		3
S. senftenberg								2	2		1
S. singapore					1		5				
S. species							1		1		
S. tennessee		1	1		11		1				
S. thompson		1	4	1	3	13	8	1			
S. typhimurium	11	8	10	36	39	68	8	35	31	28	13
S. untyped										17	3
S. urbana						1					
S. verchow						1					
S. worthington	1							1			
subgenus r1:12										1	
	20	46	55	64	289	460	201	146	116	97	82

POULTRY HEALTH PROGRAM

	REPLACEMENT SAMPLES	BROODING SAMPLES	LAYING SAMPLES	1ST HATCH SAMPLES	TOTAL
TOTAL					
No. of Submissions	108		118	101	327
No. of positives (+)	3		31	4	38
% positive	2.8		26.3	4.0	11.6

SUMMARY OF ISOLATES IN ORDER OF MOST ISOLATED

REPLACEMENT SAMPLES	LAYING SAMPLES	1ST HATCH SAMPLES
S. albany	S. neinstedten (6)	S. infantis
S. schwargengrund	S. newbrunswick	S. agona
	S. infantis (5)	
	S. typhimurium (2)	
	S. montevideo (3)	
	S. schwarzengrund (2)	
	S. heidelberg (3)	
	S. newport	
	S. oranienberg	
	S. antatum	
S. (not typed) (1)	S. (not typed) (6)	S. (not typed) (2)

NEOPLASMS

(Lethbridge, Fairview and Airdire included)

	BOVINE	OVINE	EQUINE	CANINE
Adenocarcinoma	4	3	0	6
Biliary	1	0	0	2
Intestine	1	0	0	2
Mammary	0	0	0	17
Undifferentiated	4	0	0	1
Perianal	0	0	0	3
Sweat Gland	0	0	0	1
Adenoma	0	0	4	5
Basal cell	0	0	0	1
Mammary Gland	0	0	0	7
Perianal Gland	0	0	0	10
Sebaceous Gland	0	0	1	10
Sweat Gland	0	0	0	1
Astrocytoma	0	0	0	1
Basal Cell Tumour	0	0	1	14
Carcinoma	4	1	1	5
Bronchogenic	2	0	0	1
Gastric	0	0	0	1
Squamous	26	0	6	9
Thyroid	0	0	0	1
Undifferentiated	1	0	0	2
Chondroma	0	0	0	1
Chrondrosarcoma	0	0	0	1
Embryonal Nephroma	1	0	0	0
Ependymoma	1	0	0	0
Epidermal Inclusion Cyst	1	0	1	3
Epithelioma	0	0	1	5
Epulis	0	0	0	9
Fibroma	13	1	13	5
Fibropapilloma	5	0	1	0

NEOPLASMS

(Lethbridge, Fairview and Airdrie included)

	BOVINE	OVINE	EQUINE	CANINE
Fibrosarcoma	2	0	2	5
Granulosa Cell	3	0	0	0
Heart Base Tumour	0	0	0	1
Hemangiocytoma	0	0	0	1
Hemangioma	3	0	2	5
Hemangiopericytoma	0	0	0	10
Hemangiosarcoma	2	1	1	9
Hepatoma	0	0	0	1
Histiocytoma	0	0	0	26
Histiosarcoma	0	0	0	1
Interstitial Cell Tumor	0	0	0	2
Keratoacanthoma	0	0	0	2
Leiomyoma	1	0	0	2
Leiomyosarcoma	0	0	0	1
Lipoma	0	0	0	9
Liposarcoma	1	0	0	1
Lymphosarcoma	24	0	7	9
Mastocytoma	0	0	2	12
Melanoma	3	0	9	10
Malignant	0	0	1	3
Mesothelioma	0	0	0	1
Mixed Mammary Tumor	0	0	0	18

NEOPLASMS

(Lethbridge, Fairview and Airdrie included)

	BOVINE	OVINE	EQUINE	CANINE
Myelosarcoma	0	0	0	1
Neurofibroma	3	0	0	2
Nevus	0	0	0	4
Osteoma	0	1	1	1
Osteosarcoma	0	0	1	1
Other	3	0	2	3
Papilloma	12	0	9	8
Pheochromocytoma	0	0	0	1
Polyp	0	0	0	1
Rhabdomyosarcoma	1	0	0	0
Sarcoid	0	0	60	0
Sarcoma	0	0	1	0
Reticulum Cell	0	0	0	1
Undifferentiated	1	0	0	4
Seminoma	0	0	1	9
Sertoli Cell Tumor	0	0	0	6
Trichoepithelioma	0	0	0	3
TOTAL	123	7	128	298

NEOPLASMS

(Lethbridge, Fairview and Airdrie included)

	FELINE	CAPRINE	SWINE	OTHER
Adenocarcinoma	4	0	0	1
Biliary	1	0	0	0
Intestine	1	0	0	0
Mammary Gland	4	0	0	0
Sweat Gland	1	0	0	0
Adenoma	1	0	0	0
Mammary Gland	1	0	0	0
Sebaceous Gland	1	0	0	0
Basal Cell Tumour	1	0	0	1
Carcinoma	1	0	0	0
Bronchogenic	1	0	0	0
Squamous	2	0	0	0
Thyroid	2	0	0	0
Epithelioma	1	0	0	0
Epulis	1	0	0	0
Fibroma	1	0	0	1
Fibrosarcoma	3	1	1	0
Granuloma	1	0	0	0
Histiocytoma	1	0	0	0
Lipoma	0	0	0	1
Lymphosarcoma	5	0	0	7
Mastocytoma	3	0	0	0
Melanoma	1	0	0	0
Malignant	1	0	0	0
Mesothelioma	0	0	1	0
Other	3	0	0	0
Polyp	1	0	0	0

NEOPLASMS

	FELINE	CAPRINE	SWINE	OTHER
Trichoepithelioma	1	0	0	0
Nephroma	0	0	0	1
TOTAL	44	1	2	12